Plant Status of Fukushima Daiichi Nuclear Power Station

December 31, 2011
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]
・10:37 on December 27: We started 2nd cesium adsorption facility. At 10:43 am, we reached the regular flow rate.
[Storage Facility]
・6/8～ 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)]	・15:22 on December 28 - 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)]	・Transferred from 14:37 on December 30 to 9:58 on December 31
Unit 6	・Unit 6T/B→Temporary tanks	・12/31 No plan of transfer

Place transferred	Status of Water Level (As of December 31 at 7:00)
Process Main Building	Water level: O.P.+ 2,528 mm(Accumulated total increase:3,745 mm) 61mm increase since 7:00 on December 30
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,236 mm(Accumulated total increase:3,962 mm) 181mm increase since 7:00 on December 30

・At 9:42 on December 30, We conducted changing the translation pump as the accumulated water level in Unit 2 T/B not showed the tendency of decrease.

◇Water level of the vertical shaft of the trench, T/B and R/B(As of December 31 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on December 30)	O.P.+ 2,902 mm (21mm increase since 7:00 on December 30)	O.P.+ 4,246 mm (1mm decrease since 7:00 on December 30)
Unit 2	O.P.+ 3,160 mm (24mm decrease since 7:00 on December 30)	O.P.+ 3,138 mm (23mm decrease since 7:00 on December 30)	O.P.+ 3,276 mm (15mm decrease since 7:00 on December 30)
Unit 3	O.P.+ 3,171 mm (7mm decrease since 7:00 on December 30)	O.P.+ 3,130 mm (17mm decrease since 7:00 on December 30)	O.P.+ 3,393 mm (9mm decrease since 7:00 on December 30)

Unit 4	—	O.P.+ 3,137 mm (7mm increase since 7:00 on December 30)	O.P.+ 3,144 mm (4mm increase since 7:00 on December 30)

<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
Approx. 30m North of Discharge Channel of 5,6U, 1F	12/30	8:45	ND	0.05	0.04
Approx. 330m North of Discharge Channel of 1-4U, 1F	12/30	8:25	ND	0.03	0.02
Around Discharge Channel of 3,4U, 2F	12/30	7:55	ND	ND	0.01
Approx. 7km South of Discharge Channel of 1,2U, 2F	12/30	7:35	ND	ND	0.01

・Others: samples from 3 locations at offshore of Fukushima Prefecture (sampled on December 29) showed ND for all three major nuclides (Iodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools >(As of December 31 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	13.2 ℃
Unit 3	Circulating Cooling System	Under suspension	15.4 ℃※
Unit 4	Circulating Cooling System	Under operation	25 ℃

*The temperature was recorded at 12:00 on December 31 after the stable operation of the alternative primary cooling system.

[Unit 3] 12/30 16:54 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, we will 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)

12/31 11:11～12:16 We operated the alternative primary cooling system to confirm the water temperature of Spent Fuel Pool.

[Unit 4]・11/29～ We started operation of the ion exchange equipment to remove salt from spent fuel pool.

< Water Injection to Pressure Containment Vessels > (As of December 31 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.4.4 m^3/h,Core Spray System: Approx.2.0 m^3/h)	27.2℃	27.8℃	106.9 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.1.9 m^3/h, Core Spray System: Approx.7.0 m^3/h)	53.8℃	56.2℃	108 kPaabs

Unit 3	Injecting freshwater (Feed Water System: Approx.3.0 m^3/h, Core Spray System: Approx.6.0 m^3/h)	48.0℃	56.2℃	101.6 kPaabs

【Unit 1】・About atmosphere temperature in Primary Containment Vessel, we are watching a tendency of the 1 point (C point) that the temperature increase from December 22 and 2 points(D point and E point) that the temperature increase afterwards gently.

C point (Max) approximately 54.6℃(December 28 at 18:00) → approximately 45.9℃(December 31 at 11:00)

D point (Max) approximately 35.8℃(December 29 at 17:00) → approximately 33.4℃(December 31 at 11:00)

E point (Max) approximately 40.0℃(December 29 at 17:00) → approximately 36.9℃(December 31 at 11:00)

[Unit 4][Unit 5][Unit 6]・No major change

<Others>

・10/7～ 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.

End