Plant Status of Fukushima Daiichi Nuclear Power Station

January 1, 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]
・10:37 on December 27, 2011: We started 2nd cesium adsorption facility. At 10:43 am, we reached the regular flow rate.
[Storage Facility]
・2011/6/8～ 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, 2011 - Transferring
Unit 6	・Unit 6T/B→Temporary tanks	・1/1 No plan of transfer

Place transferred	Status of Water Level (As of January 1 at 7:00)
Process Main Building	Water level: O.P.+ 2,604 mm(Accumulated total increase:3,821 mm) 76mm increase since 7:00 on December 31, 2011
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,137 mm(Accumulated total increase:3,863 mm) 99mm decrease since 7:00 on December 31, 2011

・At 9:42 on December 30, 2011, 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 January 1 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on December 31, 2011)	O.P.+ 2,902 mm (23mm increase since 7:00 on December 31, 2011)	O.P.+ 4,241 mm (5mm decrease since 7:00 on December 31, 2011)
Unit 2	O.P.+ 3,132 mm (28mm decrease since 7:00 on December 31, 2011)	O.P.+ 3,112 mm (26mm decrease since 7:00 on December 31, 2011)	O.P.+ 3,254 mm (22mm decrease since 7:00 on December 31, 2011)
Unit 3	O.P.+ 3,188 mm (17mm increase since 7:00 on December 31, 2011)	O.P.+ 3,157 mm (27mm increase since 7:00 on December 31, 2011)	O.P.+ 3,417 mm (24mm increase since 7:00 on December 31, 2011)
Unit 4	－	O.P.+ 3,132 mm (5mm decrease since 7:00 on December 31, 2011)	O.P.+ 3,147 mm (3mm increase since 7:00 on December 31, 2011)

<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	2011/12/31	8:45	ND	0.04	0.03
Approx. 330m North of Discharge Channel of 1-4U, 1F	2011/12/31	8:25	ND	0.02	0.03

・Others: samples from 2 locations at coast of Fukushima Prefecture (sampled on December 31, 2011) and from 5 locations at offshore (sampled on December 30, 2011) showed ND for all three major nuclides (Iodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools >(As of January 1 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	13.0 ℃
Unit 2	Circulating Cooling System	Under operation	13.4 ℃
Unit 3	Circulating Cooling System	Under suspension	18.3 ℃※
Unit 4	Circulating Cooling System	Under operation	24 ℃

*The temperature was recorded at 11:00 on January 1 after the stable operation of the alternative primary cooling system.

[Unit 3] 2011/12/30 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, 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)

1/1 9:50～11:11 We operated the alternative primary cooling system to confirm the water temperature of Spent Fuel Pool.

[Unit 4]・2011/11/29～ We started operation of the ion exchange equipment to remove salt from spent fuel pool.

< Water Injection to Pressure Containment Vessels > (As of January 1 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)	27.2℃	27.7℃	106.9 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.2.0 m^3/h, Core Spray System: Approx.7.0 m^3/h)	53.5℃	55.8℃	108 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.3.0 m^3/h, Core Spray System: Approx.6.0 m^3/h)	47.6℃	55.9℃	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, 2011 and 2 points(D point and E point) that the temperature increase afterwards gently.

C point (Max) approximately 54.6℃(December 28, 2011 at 18:00) → approximately 44.4℃(January 1 at 11:00)

D point (Max) approximately 35.8℃(December 29, 2011 at 17:00) → approximately 32.9℃(January 1 at 11:00)

E point (Max) approximately 40.0℃(December 29, 2011 at 17:00) → approximately 36.3℃(January 1 at 11:00)

[Unit 1 - 2] We adjusted water injection rate since we confirmed change in water volume injected into reactors.

1/1 10:57 Unit 1 : We adjusted water injection rate from core spray system from approx. 1.8m3/h to approx. 2.0m3/h (approx. 4.5m3/h from reactor feed water system was unchanged).

1/1 10:15 Unit 2 : We adjusted water injection rate from reactor feed water system and core spray system from approx. 1.8m3/h to approx. 2.0m3/h and from approx. 7.1m3/h to approx. 7.0m3/h respectively.

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

<Others>

・2011/10/7～ 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