Plant Status of Fukushima Daiichi Nuclear Power Station

December 11, 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]

・6/17 20:00 Full operation of radioactive material removal instruments started.
・6/24 12:00 Start of desalination facilities operation
・6/27 16:20 Circulating injection cooling started.
・8/7 16:11 Evaporative Concentration Facility has started full operation.
・8/19 19:33 We activated 2nd cesium adsorption facility (System B) and started the treatment of accumulated water by the parallel operation of cesium adsorption instrument and decontamination instrument. At 19:41, the flow rate achieved a steady state.

[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 1	・Unit 1T/B→Unit 2T/B	・14:00 on December 10 - Transferring
Unit 2	・Unit 2T/B→Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	・18:03 on November 30 - Transferring
Unit 3	・Unit 3T/B→Central Radioactive Waste Treatment Facility [Process Main Building]	・9:25 on November 15 -12/5 10:31
Unit 6	・Unit 6T/B→Temporary tanks	・December 11 No transfer planned.

Place transferred	Status of Water Level (As of December 11 at 7:00)
Process Main Building	Water level: O.P.+ 1,825 mm(Accumulated total increase: 3,042 mm) 104 mm decrease since 7:00 on December 10
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 1,108 mm(Accumulated total increase: 1,834 mm) 50 mm decrease since 7:00 on December 10

◇Water level of the vertical shaft of the trench, T/B and R/B(As of December 11 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on December 10)	O.P.+ 3,458 mm (239 mm decrease since 7:00 on December 10)	O.P.+ 3,906 mm (19 mm decrease since 7:00 on December 10)
Unit 2	O.P.+ 2,800 mm (9 mm increase since 7:00 on December 10)	O.P.+ 2,821 mm (7 mm increase since 7:00 on December 10)	O.P.+ 2,947 mm (3 mm increase since 7:00 on December 10)
Unit 3	O.P.+ 3,285 mm (16 mm increase since 7:00 on December 10)	O.P.+ 3,052 mm (17 mm increase since 7:00 on December 10)	O.P.+ 3,280 mm (20 mm increase since 7:00 on December 10)
Unit 4	－	O.P.+ 3,040 mm (22 mm increase since 7:00 on December 10)	O.P.+ 3,052 mm (15 mm increase since 7:00 on December 10)

<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	12/10	8:45	ND	0.06	0.05
Approx. 330m South of Discharge Channel of 1-4U, 1F	12/10	8:20	ND	0.03	0.03
Around 3,4u Discharge Channel of 2F	12/10	8:00	ND	0.02	0.02
Approx. 7km South of 1,2U Discharge Channel of 2F	12/10	7:35	ND	ND	0.01

<Cooling of Spent Fuel Pools > (As of December 11 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	28.9 ℃
Unit 3	Circulating Cooling System	Under operation	14.4 ℃
Unit 4	Circulating Cooling System	Under operation	21℃

【Unit 2】・12/10 11:37 We restarted the alternative cooling system for the 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 11 at 11:00)

Unit	Status of injecting water	Feed-water nozzle temp.	Reactor pressure vessel bottom temp.	Pressure of primary containment vessel
Unit 1	Injecting freshwater (Feed Water System: Approx. 4.2m^3/h, Core Spray System: Approx. 2.0 m^3/h)	42.6℃	43.5℃	110.2 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 2.9m^3/h, Core Spray System: Approx. 6.0 m^3/h)	69.5℃	74.5℃	111 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 3.0 m^3/h, Core Spray System: Approx. 6 0 m^3/h)	58.6℃	65.6℃	101.6 kPaabs

【Unit 1】・12/10 10:09 Regarding water injection to the reactor, we started injection from the Core Spray System in addition to the Feed Water System.

10:11 We adjusted water injection from Core Spray System to approx. 1.0 m^3/h. (Water injection from the Feed Water System continued with the level of approx. 4.2 m^3/h)

・12/11 10:30 We adjusted water injection from Core Spray System from approx. 1.0 m^3/h to approx. 2.0 m^3/h. (Water injection from the Feed Water System continued with the level of approx. 4.2 m^3/h).

【Unit 2】・12/10 11:25 Regarding water injection to the reactor, we adjusted water from the Core Spray System from approx. 4.5m^3/h to approx. 5.5m^3/h. (Water injection Feed Water System continued with the level of approx. 2.9 m^3/h.)

・12/11 10:44 We adjusted water injection from Core Spray System from approx. 5.6 m^3/h to approx. 6.0 m^3/h, while we adjusted water injection from the Feed Water System from approx. 2.5 m^3/h to approx. 3.0 m^3/h

【Unit 3】・12/10 11:25 We have adjusted water injection from the Feed Water System from approx. 2.2m^3/h to approx. 3.2 m^3/h.

(Water injection from the Core Spray System continued with the level of approx. 6.0 m^3/h)

・12/11 11:10 Because we found that there was small vibration at the Flow Control Valve of Core Spray System, we adjusted water injection from Core Spray System from approx. 6.1 m^3/h to approx. 6.5 m^3/h, while we adjusted water injection from the Feed Water System from approx. 3.1 m^3/h to approx. 2.5 m^3/h. Because the vibration of the Flow Control Valve still

continued, we adjusted water injection from the Feed Water System to approx. 3.0 m^3/h, and from Core Spray System to approx. 6.0 m^3/h. Because the vibration is tiny and would do little influence on pipe arrangements and others, we will study on its countermeasure later.

【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.