Plant Status of Fukushima Daiichi Nuclear Power Station

December 27, 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 Desalination facilities operation started.

・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.

・12/27 10:37 We activated 2nd cesium adsorption facility and resumed the treatment of accumulated water.

[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)］	・10:10 on December 26 –9:54 on December 27 - Transferred
Unit 3	・Unit 3T/B→Central Radioactive Waste Treatment Facility ［Process Main Building、Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)］	・14:35 on December 24 –9:50 on December 26 -Transferred
Unit 6	・Unit 6T/B→Temporary tanks	・December 27 No transfer

Place transferred	Status of Water Level (As of December 27 at 7:00)
Process Main Building	Water level: O.P.+ 2,153 mm (Accumulated total increase: 3,370 mm) 100 mm increase since 7:00 on December 26
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,918 mm (Accumulated total increase: 4,644 mm) 343 mm increase since 7:00 on December 26

(Other transfer) ・12/27 10:14 – 15:18 We transferred from side banker building to process main building in Centralized Radiation Waste Treatment Facility.

◇Water level of the vertical shaft of the trench, T/B and R/B(As of December 26 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on December 26)	O.P.+ 2,814 mm (25mm increase since 7:00 on December 26)	O.P.+ 4,244 mm (No change since 7:00 on December 26)
Unit 2	O.P.+ 3,184 mm (21mm decrease since 7:00 on December 26)	O.P.+ 3,161 mm (24mm decrease since 7:00 on December 26)	O.P.+ 3,291 mm (15mm decrease since 7:00 on December 26)
Unit 3	O.P.+ 3,169 mm (1mm increase since 7:00 on December 26)	O.P.+ 3,136 mm (52mm increase since 7:00 on December 26)	O.P.+ 3,387 mm (45mm increase since 7:00 on December 26)

Unit 4	—	O.P.+ 3,124 mm (10mm decrease since 7:00 on December 26)	O.P.+ 3,134 mm (18mm decrease since 7:00 on December 26)

<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	12/26	8:30	ND	0.10	0.07
Approx. 330m South of Discharge Channel of 1-4U, 1F	12/26	8:10	ND	0.03	0.03

・Others: samples from 2 locations at the coast of Fukushima Daiichi Nuclear Power Plant (sampled on December 26), from 2 locations at offshore of Fukushima Prefecture (sampled on December 25), and from 5 locations at offshore of Ibaraki Prefecture (sampled on December 20-21) showed ND for all three major nuclides (Iodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools> (As of December 27 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	11.0℃
Unit 2	Circulating Cooling System	Under operation	14.3℃
Unit 3	Circulating Cooling System	Under operation	12.5℃
Unit 4	Circulating Cooling System	Under operation	19℃

【Unit 2】・12/27 13:58～15:57 In the alternative cooling system of the spent fuel pool, as the inhale pressure of the primary circulating pump showed the tendency of decrease, we stopped the pump in order to conduct flushing of the strainer on its entry side. (Pool water temperature: at stop approx. 14.2℃ at start approx. 14.2℃)

【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 27 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. 4.3 m^3/h, Core Spray System: Approx. 2.0m^3/h)	27.6℃	28.3℃	106.3 kPaabs
Unit 2	Injecting freshwater※ (Feed Water System: Approx. 2.0 m^3/h, Core Spray System: Approx. 7.0m^3/h)	55.9℃	57.8℃	108 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 3.0 m^3/h, Core Spray System: Approx. 6.0 m^3/h)	49.9℃	58.0℃	101.6 kPaabs

【Unit 2】・12/27 11:00 for the purpose of preparation of commissioning of water injection pumps for diversification, water injection rate from core spraying system was adjusted from approx. 6.0 m3/h to 7.0 m3/h, from feed water system was adjusted from approx. 2.8 m3/h to 2.0 m3/h.

【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.

・12/27 10:19 Due to the completion of restoration of residual heat recovery (RHR) sea water pump (A) of unit 6, which was not be able to use by the affect of tsunami, commissioning was started.

11:30 As no incident was observed, it returned to usual operation. As a result, two RHR pumps, (A) and (C),

had been returned to service.

During the commissioning, while RHR pump (A) of unit 6 was temporary stopped (from 10:01 am to 11:09 am). As the increase of core water was approx. 0.7℃ and there were no concerns to the safety. (Reactor water temperature: at stop approx. 27.2℃ at start approx. 27.9℃)

End