Plant Status of Fukushima Daiichi Nuclear Power Station

December 17, 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 2	・Unit 2T/B→Central Radioactive Waste Treatment Facility［Process Main Building and Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)］	
Unit 3	・Unit 3T/B→Central Radioactive Waste Treatment Facility［Process Main Building］	・14:22 on December 15 – 10:04 on December 17, Transferred
Unit 6	・Unit 6T/B→Temporary tanks	・On December 17, no scheduled

* At 12:24 pm on the same day, we stopped the transfer since the water level at Unit 2 turbine building did not change. Then we confirmed that there was no leakage from the line. Then we opened the valve and restarted the transfer at 1:22 pm on the same day.

Place transferred	Status of Water Level (As of 12/17 at 7:00)
Process Main Building	Water level: O.P.+ 1,636 mm(Accumulated total increase:2,853 mm) 158mm increase since 7:00 on December 16
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 1,555 mm(Accumulated total increase:2,281 mm) 2mm decrease since 7:00 on December 16

◇Water level of the vertical shaft of the trench, T/B and R/B(As of December 17 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on December 16)	O.P.+ 3,225 mm (30mm increase since 7:00 on December 16)	O.P.+ 4,200 mm (34mm increase since 7:00 on December 16)
Unit 2	O.P.+ 3,015 mm (55mm increase since 7:00 on December 16)	O.P.+ 3,015 mm (81mm increase since 16:00* on December 15)	O.P.+ 3,137 mm (48mm increase since 7:00 on December 16)
Unit 3	O.P.+ 3,120 mm (25mm decrease since 7:00 on	O.P.+ 3,050 mm (64mm decrease since 7:00 on	O.P.+ 3,293 mm (53mm decrease since 7:00 on

	December 16)	December 16)	December 16)
Unit 4	—	O.P.+ 3,087 mm (27mm decrease since 7:00 on December 16)	O.P.+ 3,104 mm (6mm increase since 7:00 on December 16)

※ Compared with the data as of 16:00 on December 15, due to the fault of meter reading at 7:00 on December 16,

<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	12/16	8:35	ND	0.04	0.03
Approx. 330m South of Discharge Channel of 1-4U, 1F	12/16	8:20	ND	0.04	0.03

・Others: samples from 2 locations at the coast of Fukushima Prefecture (sampled on December 16) and from 3 locations offshore of Fukushima Prefecture (sampled on December 15) showed ND for all three major nuclides (Iodine-131,Cs-134,137).

<Cooling of Spent Fuel Pools >(As of December 17 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under suspension (due to suspension of secondary system)	13.0 ℃
Unit 2	Circulating Cooling System	Under operation	17.0 ℃
Unit 3	Circulating Cooling System	Under operation	14.2 ℃
Unit 4	Circulating Cooling System	Under operation	21 ℃

【Unit 1】・12/17 10:23 ~ In the spent fuel pool alternative cooling system, an alarm for “Air fin cooler panel malfunction” was triggered. After the investigation at the site, it was confirmed that the secondary system pressure decreased and the circulating pump (A) was shutdown automatically. After the detailed investigation, it was confirmed that the water leaked through the drainage line in the safety valve installed in the upside of the pump (A). As the position of the handle of the valve was off the usual position, we fixed it and at around 11:00 the leaking stopped. After that, we increased the system pressure. Confirming that no water leaked through the system, at 13:39, we restarted the circulating pump (A) and cooling the spent fuel pool.

The leaked water from the drainage line is for the fire extinction purpose (filtered water) and does not contain radioactive materials.

The temperature of the spent fuel at the cold shutdown and restart is 13℃ and no there is no temperature rising.

【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 17 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.4.7 m^3/h,Core Spray System: Approx.2.0 m^3/h)	33.6℃	34.4℃	109.8 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.2.8 m^3/h,Core Spray System: Approx.5.9 m^3/h)	62.5℃	66.8℃	111.0 kPaabs

Unit 3	Injecting freshwater (Feed Water System: Approx.2.8 m^3/h,Core Spray System: Approx.5.8 m^3/h)	56.1℃	62.9℃	101.6 kPaabs

【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