Plant Status of Fukushima Daiichi Nuclear Power Station

October 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 started.

・6/24 12:00 Treatment started at desalination facilities

・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 second 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 steady state.

[Storage Facility]

・6/8～ Big 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]	10:12 on October 20 -Transferring
Unit 3	・Unit 3T/B→Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	・10:00 on October 20 -Transferring
Unit 6	・Unit 6T/B→Temporary tanks	・October 27 - No plan of transfer
	・Temporary tanks→Mega float	・10:00 to 16:00 on October 27, transferred

Place transferred	Status of Water Level (As of October 27 at 7:00)
Process Main Building	Water level: O.P.+ 3,644 mm(Accumulated total increase:4,861mm) 72mm increased since 7:00 on October 26
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,360 mm(Accumulated total increase:3,086 mm) 11mm decreased since 7:00 on October 26

◇Water level of the vertical shaft of the trench, T/B and R/B(As of October 27 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on October 26)	O.P.+ 4,027 mm (45mm decrease since 7:00 on October 26)	O.P.+ 4,271 mm (47mm decrease since 7:00 on October 26)
Unit 2	O.P.+ 2,877mm (3mm decrease since 7:00 on October 26)	O.P.+ 2,910 mm (10mm increase since 7:00 on October 2+)	O.P.+ 2,998 mm (1mm increase since 7:00 on October 26)
Unit 3	O.P.+ 3,175 mm (11mm decrease since 7:00 on October 26)	O.P.+ 2,932mm (12mm decrease since 7:00 on October 26)	O.P.+ 3,103 mm (11mm decrease since 7:00 on October 26)
Unit 4	—	O.P.+ 2,973 mm (15mm decrease since 7:00 on October 26)	O.P.+ 2,998 mm (7mm decrease since 7:00 on October 26)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

※Since Oct 24, an approach to decrease the detection limits of radioactivity density was started.

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 of 1F	10/26	8:50	ND	0.02	0.02
Approx. 330m South of Discharge Channel of 1-4U of 1F	10/26	8:30	ND	0.04	0.02

・ Results of nuclide analysis of seawater, sampled on October 26 at 2 point around the Fukushima coastal area and sampled on October 25 at 8 points around the Fukushima offshore area, are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (As of 11:00 on October 27)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation (11:22 on August 10 -)	22.5 ℃
Unit 2	Circulating Cooling System	Under operation (17:21 on May 31 -)	25.0 ℃
Unit 3	Circulating Cooling System	Under operation (18:33 on June 30 -)	24.0 ℃
Unit 4	Circulating Cooling System	Under operation (10:08 on July 31 -)	32.0 ℃

[Unit 4]・8/20～ We started operation of desalinating facility of the spent fuel pool.

[Unit 3]・10/27 13:30～15:08 We injected Hydrazine to the spent fuel pool.(Approx. 2 m^3/h)

<Water Injection to Pressure Containment Vessels> (As of 11:00 on October 27)

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. 4.0 m^3/h)	67.2℃	69.3℃	120.5 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 3.1 m^3/h,Core Spray System: Approx. 7.0 m^3/h)	72.8℃	77.7℃	122 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.8m^3/h,Core Spray System: Approx. 8.0 m^3/h)	67.8℃	71.6℃	101.5 kPaabs

[Unit 1～3]

At 9:47 on October 26, we switched water injection line to emergency line because the facility was stopped due to the construction to reinforce the power supply. And we adjusted the injection volume to the reactor as follows. (Unit 1: at approx. 3.8 m^3/h through the reactor feed water system. Unit 2: at approx. 3.0 m^3/h through the reactor feed water system and at approx. 7.0 m^3/h through the core spray system. Unit 3: at approx. 3.0 m^3/h through the reactor feed water system and at approx. 8.0 m^3/h through the core spray system.)

At 15:33 on October 26, we switched back to the regular line of Unit 3 due to completion of power source reinforcement work and confirmed the flow rate was stabilized.

At 16:10 on October 26, we switched back to the regular line of Unit 1 and 2 due to completion of power source reinforcement work and confirmed the flow rate was stabilized. **

【Unit 1～2】

At 9:55 on October 27, for the water injection line of Unit 2, we switched from regular water injection line to emergency water injection line of Unit 1 and 2 due to installation work of additional flow control valve to improve controllability of water injection.

At 14:55 on October 27, we switched from emergency water injection line to regular water injection line of Unit 1 and 2 due to completion of the installation and confirmed the flow rate was stabilized.

.

【Unit 4】【Unit 5】【Unit 6】No particular changes in parameters.

<Others>

・4/10～	Clearance of outdoor rubbles by remote control to improve working conditions.
・6/28～	Main construction work for installing the cover for the reactor building of Unit 1
・8/10～9/9	Implemented setting up iron framework of the cover for the reactor building of Unit 1
・9/10～10/14	Implemented installation of panels of the cover for the reactor building of Unit 1
・10/15～	Continuously implementing the relating work for the installation of the cover for the reactor building of Unit 1.
・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.
・10/26	13:05 we started the nitrogen injection to the chain of gas control system of Primary Containment Vessel and combustible gas control system, as a part of construction to settle the gas control system of Primary Containment Vessel at the reactor building of Unit 2, near the connecting point of containment spray system and reactor shutdown cooling system※. 13:42 The nitrogen injection was finished with confirming the hydrogen density 0%. ※ We operated because we confirmed that 6.5% of hydrogen was accumulated in the chain on October 20.
・10/26	From 10:30 to 14:30,we conducted leak test of the system. As a result, we confirmed in-leak volume to the system had no problem. In addition, we conducted tentative operation test. As a result, we confirmed operational aspect of electric heater and exhaust fun had no problem.

**Although we described “At 15:20 on October 26, we switched back to the regular line of Unit 3 “ and “At 16:10 on October 26, we switched back to the regular line of Unit 1 and 2” on “Plant Status of Fukushima Daiichi Nuclear Power Station ,October 26”, we amended these sentences to “At 15:33 on October 26, we switched back to the regular line of Unit 3 due to completion of power source reinforcement work and confirmed the flow rate was stabilized” and “At 16:10 on October 26, we switched back to the regular line of Unit 1 and 2 due to completion of power source reinforcement work and confirmed the flow rate was stabilized” as described above.

End