Plant Status of Fukushima Daiichi Nuclear Power Station

November 3, 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 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［Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)］	・9:54 on October 28 – 10:02 on October 31 Transferred
Unit 3	・Unit 3T/B → Central Radioactive Waste Treatment Facility［Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)］	・From 10:11 on November 2, Being transferred
Unit 6	・Unit 6T/B→Temporary tanks	・10:00 – 16:00 on November 3 Transferred
	・Temporary tanks→Mega float	・From November 3, No transfer

Place transferred	Status of Water Level (As of November 3 at 7:00)
Process Main Building	Water level: O.P.+ 2,795 mm(Accumulated total increase:4,012 mm) 137mm decrease since 7:00 on November 2
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 1,454 mm(Accumulated total increase:2,180 mm) 117mm decrease since 7:00 on November 2

◇Water level of the vertical shaft of the trench, T/B and R/B(As of November 3 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on November 2)	O.P.+ 4,313 mm (30mm increase since 7:00 on November 2)	O.P.+ 4,318 mm (37mm increase since 7:00 on November 2)
Unit 2	O.P.+ 2,932 mm (56mm increase since 7:00 on November 2)	O.P.+ 2,958 mm (51mm increase since 7:00 on November 2)	O.P.+ 3,035 mm (52mm increase since 7:00 on November 2)

Unit 3	O.P.+ 3,248 mm (7mm increase since 15:00 on November 1)*	O.P.+ 3,026 mm (33mm decrease since 7:00 on November 2)	O.P.+ 3,211 mm (26mm decrease since 7:00 on November 2)
Unit 4	—	O.P.+ 3,047 mm (8mm increase since 7:00 on November 2)	O.P.+ 3,062 mm (26mm increase since 7:00 on November 2)

* Compared with the data at 15:00 on November 1, since data was not recorded at 7:00 on November 2 due to lack of power supply to the water gauge.

<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	11/2	8:40	ND	0.07	0.05
Approx. 330m South of Discharge Channel of 1-4U of 1F	11/2	8:20	ND	0.02	0.02
Around Discharge Channel of 3-4u of 2F	11/2	8:25	ND	0.02	0.01
Approx 7km South of Discharge Channel of 1-2u of 2F	11/2	7:55	ND	0.02	ND

・Results of nuclide analysis of seawater at other 6 offshore points sampled on November 1 are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (As of November 3 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation(11:22 on August 10 -)	22.0 ℃
Unit 2	Circulating Cooling System	Under operation(17:21 on May 31 -)	25.2 ℃
Unit 3	Circulating Cooling System	Under operation(18:33 on June 30 -)	23.6 ℃
Unit 4	Circulating Cooling System	Under operation(10:08 on July 31 -)	31 ℃

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

<Water Injection to Pressure Containment Vessels> (As of November 3 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. 7.7 m^3/h)	49.3℃	49.9℃	123.5 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 2.9 m^3/h,Core Spray System: Approx. 7.1 m^3/h)	70.6℃	75.7℃	113 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.5 m^3/h,Core Spray System: Approx. 8.1m^3/h)	63.9℃	70.5℃	101.5 kPaabs

【Unit 2】・11/3 12:40 In order to improve reliability of nitrogen injection, additional flow gauge is started to install at the Unit 2 nitrogen injection line.

Around 14:00 The work was finished. Although nitrogen injection was stopped for approx. 10 minutes during the work, there were no significant changes in the parameters

・ 11/3 16:50 Since some increase at the hydrogen density (hydrogen density of 2.9% [As of 16:30

on 11/3]) in the exhaust gas from PCV was observed from the last time of nitrogen injection amount change (hydrogen density of 2.7% [As of 18:10 on 10/30]), nitrogen injection amount was changed from 21m^3/h to 26m^3/h.

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

<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.

・11/2 We found a possibility to detect short-half-life radionuclide such as Xe-133 and Xe-135 according to our radionuclide analysis sampled on November 1 by the gas management system of the reactor containment vessel of Unit 2. We continued to monitor the temperature, pressure and data from monitoring post and there was no significant fluctuation from those data. As we can't be denied a possibility of fission reactions, we injected boric acid water from reactor feed water system (2:48-3:47). At around 19:20, Japan Atomic Energy Agency evaluated that our analysis result of the short-half-life radionuclide such as Xe-133 and Xe-135 detection was valid. We consider that they were generated by the spontaneous fission, since density of detected short-half-life radionuclide (Xe-135) is low, short-half-life radionuclide (Xe-135) was detected even after the boric acid injection to terminate the chain reaction of atomic fission, and there were no significant changes in the parameters of reactor.

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End