Plant Status of Fukushima Daiichi Nuclear Power Station

November 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 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.

・11/17 approx. 10:50 Water leakage by pin holes at one point of freshwater transfer line, and three points at concentrated water transfer line after desalination process, was confirmed at desalination apparatus.

approx. 14:30 Transfer was continued at fresh water transfer line, and at the same time, leakage repair (repair by tapes) was implemented and completed (leakage amount: approx. 1liter). Cesium adsorption apparatus, 2nd adsorption apparatus and concentrated evaporation apparatus continued operation, and therefore there is no major effect with processing accumulated water. Also, concentrated water transfer line is currently not being used, and is isolated.

[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)]	・9:10 on November 10 - Transferring
Unit 3		
	・Unit 3T/B→Central Radioactive Waste Treatment Facility [Process Main Building]	・9:25 on November 15 - Transferring
Unit 6	・Unit 6T/B→Temporary tanks	・ 11/17 10:00-16:00

Place transferred	Status of Water Level (As of November 17 at 7:00)
Process Main Building	Water level: O.P.+ 1,534 mm(Accumulated total increase:2,751 mm) 49mm increase since 7:00 on November 16
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,035 mm(Accumulated total increase:2,761 mm) 52mm decrease since 7:00 on November 16

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

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm	O.P.+ 3,575 mm	O.P.+ 4,513 mm

	(No change since 7:00 on November 16)	(43mm increase since 7:00 on November 16)	(26mm decrease since 7:00 on November 16)
Unit 2	O.P.+ 3,114 mm (17mm decrease since 7:00 on November 16)	O.P.+ 3,127 mm (14mm decrease since 7:00 on November 16)	O.P.+ 3,228 mm (13mm decrease since 7:00 on November 16)
Unit 3	O.P.+ 3,295 mm (13mm increase since 7:00 on November 16)	O.P.+ 3,067 mm (16mm increase since 7:00 on November 16)	O.P.+ 3,269 mm (17mm increase since 7:00 on November 16)
Unit 4	—	O.P.+ 3,083 mm (16mm increase since 7:00 on November 16)	O.P.+ 3,099 mm (5mm increase since 7:00 on November 16)

<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	11/16	8:35	ND	0.03	0.04
Approx 330m South of Discharge Channel of 1-4u of 1F	11/16	8:20	ND	0.02	0.01
Discharge Channel of 3,4U of 2F	11/16	8:20	ND	ND	0.01
Approx 7km South of Discharge Channel of 1,2u of 2F	11/16	7:55	ND	0.02	0.02

・Others: Results of nuclide analysis of seawater at 5 points offshore Fukushima Prefecture sampled on November 15 are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools > (As of November 17 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 -)	18.0 ℃
Unit 2	Circulating Cooling System	Under operation(17:21 on May 31 -)	19.3 ℃
Unit 3	Circulating Cooling System	Under operation(18:33 on June 30 -)	19.2 ℃
Unit 4	Circulating Cooling System	Under operation(10:08 on July 31 -)	28℃

【Unit 2】・11/6～ We started operation of radioactive material decontamination instrument of spent fuel pool.

【Unit 3】・11/17 13:32～14:55 For cleaning 1st system strainer of spent fuel pool circulating cooling system*, circulating cooling was temporarily stopped. * To deal with an alert in the past due to decrease of suction pressure at 1st system pump of circulating cooling system.

【Unit 4】・11/17 13:15～14:50 Hydrazine was injected (approx. 2m3)

・11/17 14:58 An error alarm of spent fuel pool circulating cooling system went off, and the system automatically shut down. It was confirmed after, by site investigation, that there is no water leakage. We are currently investigating the cause of alarm.

【Unit 6】・11/15～ From November 15, due to cleanup work in order to prevent performance deterioration of pump caused by inletting sand or other materials piled up at the bottom of pump room of intake channel, Residual Heat Removal System (A) was shutdown, and stopped cooling the reactor. And Seawater pump of Equipment Water Cooing System (A) was shutdown, and stopped cooling the spent fuel pool. The stop is scheduled from 7:00 am to 5:00 pm everyday, and reactor water temperature will rise by approx. 12℃ per day, and spent fuel pool water temperature will rise by approx. 3℃ per day. (The cleanup work is planned to be finished in a week.)

<Water Injection to Pressure Containment Vessels >(As of November 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.7.7 m^3/h)	35.6℃	36.5℃	123.5 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.2.7 m^3/h,Core Spray System: Approx.7.4 m^3/h)	65.5℃	68.3℃	109 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.2.5 m^3/h,Core Spr System: Approx.8.1 m^3/h)	57.2℃	68.0℃	101.5 kPaabs

【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.

・11/17 9:15-13:09 At unit 1 and 2 emergency reactor injection line, flow amount adjusting valve was additionally installed to control the amount of water injection. Water injection to reactor is done through regular reactor water injection line, and therefore the additional installation above has no impact.

・11/17 13:50- For the preparation of installation of PCV gas management system at unit 3 reactor building 1F, a robot is currently wiping off water from northeast facilities hatch rail, and investigating radiation dose.

End