Plant Status of Fukushima Daiichi Nuclear Power Station

October 28, 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.

・10/26 Replacement of reverse osmosis membrane condense transfer hose conducted where water leakage was found on October 8 at water desalination facility (reverse osmosis membrane type).・10/27～28 Replacement of law water pump (for 2-1 skid)conducted where water leakage from shaft seal was found on October 24 at water desalination facility #2(reverse osmosis membrane type).

[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］ ・ Unit 2T/B→Central Radioactive Waste Treatment Facility［Miscellaneous Solid Waste Volume Reduction Treatment Building］	・ From 10:12 October 20 to 9:32 October 28 -Transferred ・ 9:54 on October 28 -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 to 9:16 October 28 –Transferred
Unit 6	・Unit 6T/B→Temporary tanks	・October 28 - No plan of transfer
	・Temporary tanks→Mega float	・10:00 to 16:00 on October 28, transferred

Place transferred	Status of Water Level (As of October 28 at 7:00)
Process Main Building	Water level: O.P.+ 3,722 mm(Accumulated total increase:4,939mm) 78mm increased since 7:00 on October 27
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,291 mm(Accumulated total increase:3,017 mm) 69mm decreased since 7:00 on October 27

◇Water level of the vertical shaft of the trench, T/B and R/B(As of October 28 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on October 27)	O.P.+ 4,080 mm (53mm increase since 7:00 on October 27)	O.P.+ 4,225mm (46mm decrease since 7:00 on October 27)
Unit 2	O.P.+ 2,857mm (20mm decrease since 7:00 on October 27)	O.P.+ 2,892 mm (18mm decrease since 7:00 on October 27)	O.P.+ 2,983 mm (15mm decrease since 7:00 on October 27)
Unit 3	O.P.+ 3,164 mm (11mm decrease since 7:00 on October 27)	O.P.+ 2,919mm (13mm decrease since 7:00 on October 27)	O.P.+ 3,092 mm (11mm decrease since 7:00 on October 27)
Unit 4	—	O.P.+ 2,960 mm (13mm decrease since 7:00 on October 27)	O.P.+ 2,986 mm (12mm decrease since 7:00 on October 27)

<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	10/27	8:50	ND	0.09	0.07
Approx. 330m South of Discharge Channel of 1-4U of 1F	10/27	8:30	ND	0.02	0.02

・ Results of nuclide analysis of seawater, sampled on October 27 at 2 point 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 28)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation (11:22 on August 10 -)	21.5 ℃
Unit 2	Circulating Cooling System	Under operation (17:21 on May 31 -)	24.3 ℃
Unit 3	Circulating Cooling System	Under operation (18:33 on June 30 -)	22.8 ℃
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 11:00 on October 28)

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. 3.9 m^3/h)	65.9℃	68.1℃	121.9 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 2.9 m^3/h,Core Spray System: Approx. 6.9 m^3/h)	72.6℃	77.5℃	121 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.6 m^3/h,Core Spray System: Approx. 8.0 m^3/h)	66.5℃	71.0℃	101.5 kPaabs

【Unit 1～2】・10/28 9:30 Due to the additional installment of control valve of Unit 1 water injection line to improve controllability of water injection, we switched water injection line into the

reactor of Unit 1 and Unit 2 from normal line to emergency line.

13:30 As the installment work was finished, we switched water injection line from emergency line to normal line. We adjusted water injection rate from feed water system approx. 3.9m^3/h for Unit 1. We also adjusted water injection rate from feed water system approx. 3.0m^3/h and from core spraying system approx. 7.0 m^3/h for Unit 2.

【Unit 1】 ・10/28 16:10 Water injection rate from feed water line adjusted to approx. 4.5m^3/h for the purpose of controlling released radioactivity due to control of vapor and improving working environment inside cover of Unit 1.

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

<Others>

・6/28～10/28 Main construction work for installing the cover for the reactor building of Unit 1 completed.

・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

・10/15～10/28 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.

・10/27 While the staff from a cooperating company was conducting an annual checkup of the ceiling crane, which handles used fuel casks, a crack was found on the casing of the connection point of the vehicle for driving. We will inspect the further details of the connection point.

・10/28 12:53 we started up the exhaust fan of gas management system of primary containment vessel in the reactor building of Unit 2 and commenced commissioning.

・10/28 14:20 One of TEPCO’s employee conducting document check at administrative building has removed face mask when that employee felt sick and vomit, We plan to conduct check the intake by whole body counter. We have confirmed there was no contamination on the face.

End