

Plant Status of Fukushima Daiichi Nuclear Power Station

October 30, 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 - 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 -10/28 9:16 Transferring
Unit 6	•Unit 6T/B→Temporary tanks	•From 10:00 to 16:00 on October 30 Transferring
	•Temporary tanks→Mega float	•On October 30 No transfer

Place transferred	Status of Water Level (As of October 30 at 7:00)
Process Main Building	Water level: O.P.+ 3,374 mm(Accumulated total increase:4,591 mm) 192mm decrease since 7:00 on October 29
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,245 mm(Accumulated total increase:2,971 mm) 8mm increase since 7:00 on October 29

◇Water level of the vertical shaft of the trench, T/B and R/B(As of October 30 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on October 29)	O.P.+ 4,147 mm (44mm increase since 7:00 on October 29)	O.P.+ 4,201 mm (2mm increase since 7:00 on October 29)
Unit 2	O.P.+ 2,807 mm (31mm decrease since 7:00 on October 29)	O.P.+ 2,845 mm (28mm decrease since 7:00 on October 29)	O.P.+ 2,923 mm (34mm decrease since 7:00 on October 29)
Unit 3	O.P.+ 3,197 mm	O.P.+ 2,990 mm (22mm increase since 7:00 on	O.P.+ 3,162 mm (29mm increase since 7:00 on

	(20mm increase since 7:00 on October 29)	October 29)	October 29)
Unit 4	—	O.P.+ 2,980 mm (16mm increase since 7:00 on October 29)	O.P.+ 3,002 mm (15mm increase since 7:00 on October 29)

<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	10/29	8:40	ND	0.18	0.14
Approx. 330m South of Discharge Channel of 1-4U of 1F	10/29	8:20	ND	0.02	0.02
North Discharge Channel, 2F (Approx.10km from 1F)	10/29	8:15	ND	0.01	ND

•Others: results of nuclide analysis of seawater, at 1 point around the shore sampled on October 29 and 3 points offshore of Fukushima sampled on October 28, are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (As of October 30 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
<u>Unit 1</u>	Circulating Cooling System	Under operation(11:22 on August 10 -)	21.0 °C
<u>Unit 2</u>	Circulating Cooling System	Under operation(17:21 on May 31 -)	24.4 °C
<u>Unit 3</u>	Circulating Cooling System	Under operation(18:33 on June 30 -)	22.9 °C
<u>Unit 4</u>	Circulating Cooling System	Under operation(10:08 on July 31 -)	31 °C

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

<Water Injection to Pressure Containment Vessels> (As of October 30 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. 5.5 m ³ /h)	62.0°C	63.7°C	124.6 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 2.7 m ³ /h, Core Spray System: Approx. 7.0 m ³ /h)	71.9°C	75.9°C	112 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.5 m ³ /h, Core Spray System: Approx. 8.0 m ³ /h)	65.4°C	71.4°C	101.5 kPaabs

【Unit 1】・10/30 15:05 we changed the water injection rate to Reactor, Unit 1 through Feed Water System to approx.6.5 m³/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.

- 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. After confirming that the system operates normally, at 18:00, we put the system in operation.
- 10/29 Regarding the hydrogen concentration in the gas emission of the gas management system of the reactor containment vessel in Unit 2, we confirmed that it increased to approx. 2.3vol% at 5:00pm on 29 October, which was approx. 1vol% at the beginning of the operation. Therefore we adjusted the amount of injecting nitrogen gas from approx.14 m³/h to 16.5 m³/h in order to avoid exceeding the combustible threshold concentration (4vol%).
- 10/29 8:30 Two workers from the cooperating companies were injured during dismantling of the large crane used to install the cover for the Reactor Building, Unit 1 within the site boundary. At 10:35, we transported one worker to Fukushima Medical University Hospital by an air ambulance and provided medical treatment including operation. At 14:20, we transported the other worker to Sogo Iwaki Kyoritsu Hospital, Iwaki City and provided medical checkup.

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