

Plant Status of Fukushima Daiichi Nuclear Power Station

November 2, 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)]	· 10:00 on October 20 – October 28 9:16 Transferred
Unit 6	· Unit 6T/B Temporary tanks	· On November 1 No transfer
	· Temporary tanks Mega float	· Transferred from 10:00 to 15:00 November 2

Place transferred	Status of Water Level (As of November 2 at 7:00)
Process Main Building	Water level: O.P.+ 2,932 mm(Accumulated total increase:4,149 mm) 106mm decrease since 7:00 on November 1
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 1,571 mm(Accumulated total increase:2,297 mm) 501mm decrease since 7:00 on November 1

Water level of the vertical shaft of the trench, T/B and R/B(As of November 2 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on November 1)	O.P.+ 4,283 mm (32mm increase since 7:00 on November 1)	O.P.+ 4,281 mm (23mm increase since 7:00 on November 1)
Unit 2	O.P.+ 2,876 mm (53mm increase since 7:00 on November 1)	O.P.+ 2,907 mm (49mm increase since 7:00 on November 1)	O.P.+ 2,983 mm (49mm increase since 7:00 on November 1)

Unit 3	O.P.+ 3,237 mm* ( - )	O.P.+ 3,059 mm (22mm increase since 7:00 on November 1)	O.P.+ 3,237 mm (25mm increase since 7:00 on November 1)
Unit 4	-	O.P.+ 3,039 mm (14mm increase since 7:00 on November 1)	O.P.+ 3,036 mm (No change since 7:00 on November 1)

\* As of at 15:00 on November 1. No data 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	11/1	8:40	ND	0.04	0.04
Approx. 330m South of Discharge Channel of 1-4U of 1F	11/1	8:20	ND	ND	0.01
South Discharge Channel, 2F (Approx.16km from 1F)	11/1	8:20	ND	0.02	ND

· Others: results of nuclide analysis of seawater at 1 point around the shore 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 2 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 -)	21.5
<u>Unit 2</u>	Circulating Cooling System	Under operation(17:21 on May 31 -)	24.7
<u>Unit 3</u>	Circulating Cooling System	Under operation(18:33 on June 30 -)	23.1
<u>Unit 4</u>	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.

· 11/2 10:16-12:20, hydrazine(corrosion inhibitor) was injected into the spent fuel pool.

<Water Injection to Pressure Containment Vessels> (As of November 2 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. 7.6 m <sup>3</sup> /h)	50.6	51.6	124.0 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 3.0 m <sup>3</sup> /h,Core Spray System: Approx. 7.0 m <sup>3</sup> /h)	71.3	75.1	113 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.5 m <sup>3</sup> /h,Core Spray System: Approx. 8.0m <sup>3</sup> /h)	64.3	70.4	101.5 kPaabs

[Unit 1·2] · 11/2 4:14 we changed the water injection from Feed Water System to approx.7.5 m<sup>3</sup>/h for Unit 1, and from Feed Water System to approx.3.0 m<sup>3</sup>/h and water injection from Core spray System to approx.7.0 m<sup>3</sup>/h for Unit2.

\* When we restored the water injection lines which had been changed due to the boric acid water injection, we adjusted the water injection volume.

[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 2:48-3:47 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.

End