

**Plant Status of Fukushima Daiichi Nuclear Power Station**

December 10, 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 2nd 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 a steady state.

[Storage Facility]

- 6/8 ~ Large 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 1	·Unit 1T/B Unit 2T/B	·14:00 on December 10 - Transferring
Unit 2	·Unit 2T/B Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	·18:03 on November 30 - Transferring
Unit 3	·Unit 3T/B Central Radioactive Waste Treatment Facility [Process Main Building]	·9:25 on November 15 -12/5 10:31
Unit 6	·Unit 6T/B Temporary tanks	·10:00 on December 8 -12/9 16:00 Transferring

Place transferred	Status of Water Level (As of December 10 at 7:00)
Process Main Building	Water level: O.P.+ 1,929 mm(Accumulated total increase: 3,146 mm) 107 mm decrease since 7:00 on December 9
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 1,158 mm(Accumulated total increase: 1,884 mm) 55 mm decrease since 7:00 on December 9

Water level of the vertical shaft of the trench, T/B and R/B(As of December 10 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on December 9)	O.P.+ 3,697 mm (30 mm increase since 7:00 on December 9)	O.P.+ 3,925 mm (87 mm decrease since 7:00 on December 9)
Unit 2	O.P.+ 2,791 mm (28 mm decrease since 7:00 on December 9)	O.P.+ 2,814 mm (25 mm decrease since 7:00 on December 9)	O.P.+ 2,944 mm (25 mm decrease since 7:00 on December 9)
Unit 3	O.P.+ 3,269 mm (18 mm increase since 7:00 on December 9)	O.P.+ 3,035 mm (18 mm increase since 7:00 on December 9)	O.P.+ 3,260 mm (19 mm increase since 7:00 on December 9)
Unit 4	-	O.P.+ 3,018 mm (11 mm increase since 7:00 on December 9)	O.P.+ 3,037 mm (15 mm increase since 7:00 on December 9)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

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, 1F	12/9	8:40	ND	0.05	0.04
Approx. 330m South of Discharge Channel of 1-4U, 1F	12/9	8:20	ND	0.02	0.04
Around 3,4u Discharge Channel of 2F	12/9	8:25	ND	ND	0.01

- Others, samples from 1 location at coast of Fukushima Daiichi Nuclear Power Station (sampled on December 9) , and 2 locations at offshore (sampled on December 8), showed ND for all three major nuclides (Iodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools > (As of December 10 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 -)	14.0
Unit 2	Circulating Cooling System	Under operation (17:21 on 5/31 - )	31.3
Unit 3	Circulating Cooling System	Under operation(18:33 on June 30 -)	14.9
Unit 4	Circulating Cooling System	Under operation(10:08 on July 31 -)	21

[Unit 2] · 12/10 11:37 We restarted the alternative cooling system for the spent fuel pool.

[Unit 4] · 11/29 ~ We started operation of the ion exchange equipment to remove salt from spent fuel pool.

< Water Injection to Pressure Containment Vessels > (As of December 10 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. 4.2m <sup>3</sup> /h, Core Spray System: Approx. 1.0 m <sup>3</sup> /h)	43.3	44.4	111.1 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 2.8m <sup>3</sup> /h, Core Spray System: Approx. 5.2 m <sup>3</sup> /h)	71.3	78.1	113 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.1 m <sup>3</sup> /h, Core Spray System: Approx. 6.0 m <sup>3</sup> /h)	59.5	66.4	101.6 kPaabs

[Unit 1] · 12/10 10:09 Regarding water injection to the reactor, we started injection from the Core Spray System in addition to the Feed Water System.

10:11 We adjusted water injection from Core Spray System to approx. 1.0 m<sup>3</sup>/h. (Water injection from the Feed Water System continued with the level of approx. 4.2 m<sup>3</sup>/h)

[Unit 2] · 12/10 11:25 Regarding water injection to the reactor, we adjusted water from the Core Spray System from approx. 4.5m<sup>3</sup>/h to approx. 5.5m<sup>3</sup>/h. (Water injection Feed Water System continued with the level of approx. 2.9 m<sup>3</sup>/h.)

[Unit 3]

12/6 10:00 – 12/7 8:54

We plan to establish the system injecting water into the reactor of Unit 1 to 3 using the condensate storage tank of Unit 3. During the measurement of salt concentration in the water in the tank, it turned out that concentration was high. In order to reduce such concentration, we planned to inject water after reducing the water in the tank first. The water in the tank was transferred from the tank to the basement of turbine building.

- 12/7 9:19 We started filling water in the tank, but afterwards, we confirmed water leakage (approx. 5 liter) at the joint section of hose connecting to the tank, at approx. 9:52 am, we stopped filling water and confirmed the leakage has stopped.
- 12/9 9:05 We restarted filling the water in the tank after completing the replacement of the transfer hose.  
9:25 We finished surveillance of leakage in the transferring hose.  
19:00 We finished filling the water.
- 12/10 11:25 We have adjusted water injection from the Feed Water System from approx. 2.2m<sup>3</sup>/h to approx. 3.2 m<sup>3</sup>/h.  
(Water injection from the Core Spray System continued with the level of approx. 6.0 m<sup>3</sup>/h)
- [Unit 4] [Unit 5] [Unit 6] No major change

<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.
- 12/10 9:00-10:30 We conducted dust sampling at upper part of Unit 3R/B by a large crane.

End