

Plant Status of Fukushima Daiichi Nuclear Power Station

December 24, 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 Desalination facilities operation started.
- 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	·16:07 on December 23 -Transferring
Unit 2	·Unit 2T/B Central Radioactive Waste Treatment Facility [Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	·13:57 on December 21-9:42 December 23 -Transferred
Unit 3	·Unit 3T/B Central Radioactive Waste Treatment Facility [Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	·14:35 on December 24 -Transferring
Unit 6	·Unit 6T/B Temporary tanks	·12/24 No plan of transfer

Place transferred	Status of Water Level (As of December 24 at 7:00)
Process Main Building	Water level: O.P.+ 2,016 mm(Accumulated total increase: 3,233 mm) 36mm increase since 7:00 on December 23
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,131 mm(Accumulated total increase: 2,857 mm) 88mm increase since 7:00 on December 23

Water level of the vertical shaft of the trench, T/B and R/B(As of December 24 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on December 23)	O.P.+ 3,178 mm (206mm decrease since 7:00 on December 23)	O.P.+ 4,223 mm (5mm decrease since 7:00 on December 23)
Unit 2	O.P.+ 3,034 mm (87mm increase since 7:00 on December 23)	O.P.+ 3,030 mm (82mm increase since 7:00 on December 23)	O.P.+ 3,151 mm (59mm increase since 7:00 on December 23)

Unit 3	O.P.+ 3,228 mm (18mm increase since 7:00 on December 23)	O.P.+ 3,204 mm (17mm increase since 7:00 on December 23)	O.P.+ 3,453 mm (19mm increase since 7:00 on December 23)
Unit 4	-	O.P.+ 3,180 mm (23mm increase since 7:00 on December 23)	O.P.+ 3,185 mm (16mm increase since 7:00 on December 23)

· 12/23 10:19-20:13 We transferred the accumulated water in trench which was found between Process Main Building and Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building) of Central Radioactive Waste Treatment Facility on December 18, to the Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building). (The transferred amount is approx. 120m³ and the remaining water is approx. 100m³)

<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	12/23	8:50	ND	0.04	0.03
Approx. 330m South of Discharge Channel of 1-4U, 1F	12/23	8:30	ND	0.04	0.03
Approx. 3 km offshore of Iwasawa Shore Upper Layer	12/22	7:45	ND	0.01	0.01

· Others: samples from 2 location at the coast of Fukushima Daiichi Nuclear Power Plant (sampled on December 23) and from 4 locations offshore (sampled on December 22) showed ND for all three major nuclides (Iodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools> (As of December 24 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
<u>Unit 1</u>	Circulating Cooling System	Under operation	11.0
<u>Unit 2</u>	Circulating Cooling System	Under operation	22.5
<u>Unit 3</u>	Circulating Cooling System	Under operation	13.1
<u>Unit 4</u>	Circulating Cooling System	Under operation	20

[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 24 at 11:00)

Unit	Status of water injection	Feed-water nozzle Temp.	Reactor pressure vessel Bottom temp.	Pressure of primary containment vessel
Unit 1	Injecting freshwater (Feed Water System: Approx. 4.3 m ³ /h, Core Spray System: Approx. 2.0m ³ /h)	28.4	29.3	105.6 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 2.9 m ³ /h, Core Spray System: Approx. 6.0m ³ /h)	57.5	61.1	109 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 3.0 m ³ /h, Core Spray System: Approx. 6.0 m ³ /h)	52.0	59.8	101.6 kPaabs

[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.

End