

Plant Status of Fukushima Daiichi Nuclear Power Station

December 26, 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 2	·Unit 2T/B Central Radioactive Waste Treatment Facility [Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	·10:10 on December 26--Transferring
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 -9:50 on December 26 -Transferred
Unit 6	·Unit 6T/B Temporary tanks	·10:00 – 16:00 on December 26 - Transferred

Place transferred	Status of Water Level (As of December 26 at 7:00)
Process Main Building	Water level: O.P.+ 2,053 mm (Accumulated total increase: 3,270 mm) 22 mm increase since 7:00 on December 25
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,575 mm (Accumulated total increase: 4,301 mm) 941mm increase since 7:00 on December 25

Water level of the vertical shaft of the trench, T/B and R/B(As of December 26 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on December 25)	O.P.+ 2,789 mm (18mm decrease since 7:00 on December 25)	O.P.+ 4,244 mm (12mm increase since 7:00 on December 25)
Unit 2	O.P.+ 3,205 mm (57mm increase since 7:00 on December 25)	O.P.+ 3,185 mm (55mm increase since 7:00 on December 25)	O.P.+ 3,306 mm (56mm increase since 7:00 on December 25)
Unit 3	O.P.+ 3,168 mm	O.P.+ 3,084 mm	O.P.+ 3,342 mm

	(38mm decrease since 7:00 on December 25)	(61mm decrease since 7:00 on December 25)	(64mm decrease since 7:00 on December 25)
Unit 4	-	O.P.+ 3,134 mm (28mm decrease since 7:00 on December 25)	O.P.+ 3,152 mm (32mm decrease since 7:00 on December 25)

<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	12/25	8:40	ND	0.14	0.11
Approx. 330m South of Discharge Channel of 1-4U, 1F	12/25	8:20	ND	0.04	0.04
Approx. 3km Offshore of Haramachi Ward Lower Layer	12/24	8:45	ND	ND	0.02

·Others: samples from 2 locations at the coast of Fukushima Daiichi Nuclear Power Plant (sampled on December 25), from 4 locations at offshore of Fukushima Prefecture (sampled on December 24), and from 6 locations at offshore of Miyagi Prefecture (sampled on December 19) showed ND for all three major nuclides (Iodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools> (As of December 26 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
<u>Unit 1</u>	Circulating Cooling System	Under operation	10.5
<u>Unit 2</u>	Circulating Cooling System	Under operation	15.9
<u>Unit 3</u>	Circulating Cooling System	Under operation	12.6
<u>Unit 4</u>	Circulating Cooling System	Under operation	19

[Unit 2] · 12/26 13:36 ~ 15:12 We injected hydrazine into the spent fuel pool (approx. 2 m³).

[Unit 3] · 12/26 14:00 ~ 16:32 In the alternative cooling system of the spent fuel pool, since the inhale pressure of the primary circulating pump showed tendency of decrease, we stooped the system in order to conduct flushing of the strainer on its entry side. (the temperature at the time of the suspension: approx. 13 , the temperature when cooling restarted: approx. 13 .)

[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 26 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)	27.7	28.5	105.7 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 2.8 m ³ /h, Core Spray System: Approx. 6.0m ³ /h)	56.4	59.1	108 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 3.0 m ³ /h, Core Spray System: Approx. 6.0 m ³ /h)	50.5	58.6	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.
- 12/26 13:22 Regarding the injection of nitrogen into the Primary Containment Vessel of Unit 1 and gas emission from gas management system for the Primary Containment Vessel, considering the operating track record, we adjusted the volume of nitrogen injection into the Primary Containment Vessel from approx. $13\text{m}^3 / \text{h}$ to approx. $8\text{m}^3 / \text{h}$. At 1:43 pm, we adjusted the emission amount from the gas management system from approx. $28\text{m}^3 / \text{h}$ to approx. $23\text{m}^3 / \text{h}$.

End