

Plant Status of Fukushima Daiichi Nuclear Power Station

November 7, 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 (RO membrane system)
- 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.

- 11/6 At around 11:00

Since partner companies' workers who went on patrol found that the boiler of evaporative concentration apparatus stopped, we stopped operation of the apparatus 3B and 3C.

Since the operation panel on the site alerted "Very low water level in boiler supply water tank", we assumed that the boiler stopped due to this reason. After that, we conducted investigation of the cause of decrease of supply tank water level. When we started a backup pump for transfer of boiler supply water, the alert stopped. Therefore we judged that one pump was troubled.

In addition, although all the evaporative concentration apparatus stopped, water treatment by the water desalinations (RO membrane system) and water injection to the reactors have been continued.

[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 1	· Unit 1T/B Unit 2T/B	· November 7, No transfer
Unit 2	· Unit 2T/B Central Radioactive Waste Treatment Facility [ Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building) ]	· From 9:38 on November 4, Being transferred
Unit 3	· Unit 3T/B Central Radioactive Waste Treatment Facility [ Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building) ]	· From 10:11 on November 2, Being transferred
Unit 6	· Unit 6T/B Temporary tanks	· November 7, No transfer
	· Temporary tanks Mega float	· November 7, No transfer

Place transferred	Status of Water Level (As of November 7 at 7:00)
Process Main Building	Water level: O.P.+ 2,361mm(Accumulated total increase:3,578 mm) 120mm decrease since 7:00 on November 6
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,412 mm(Accumulated total increase:3,138 mm) 342mm increase since 7:00 on November 6

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

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.< + 850 mm (No change since 7:00 on November 6)	O.P.+ 3,803 mm (15mm increase since 7:00 on November 6)	O.P.+ 4,477 mm (44mm increase since 7:00 on November 6)
Unit 2	O.P.+ 3,020 mm (16mm decrease since 7:00 on November 6)	O.P.+ 3,038 mm (16mm decrease since 7:00 on November 6)	O.P.+ 3,133 mm* (11mm increase since 16:00 on November 5)
Unit 3	O.P.+ 3,203 mm (11mm decrease since 7:00 on November 6)	O.P.+ 2,960 mm (12mm decrease since 7:00 on November 6)	O.P.+ 3,147 mm (13mm decrease since 7:00 on November 6)
Unit 4	-	O.P.+ 2,999 mm (11mm decrease since 7:00 on November 6)	O.P.+ 3,021 mm (12mm decrease since 7:00 on November 6)

\* We compare the amount with that was sampled at 16:00 on November 5, because no data was sampled at 7:00 on November 6 due to camera trouble.

#### <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	11/6	8:40	ND	0.09	0.07
Approx 330m South of Discharge Channel of 1-4u of 1F	11/6	8:20	ND	0.13	0.11

· Results of nuclide analysis of seawater at 2 Fukushima seashore points sampled on November 6, and 3 offshore points sampled on November 5, are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

#### <Cooling of Spent Fuel Pools> (As of November 7 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 -)	22.5
<u>Unit 2</u>	Circulating Cooling System	Under operation(17:21 on May 31 -)	26.8
<u>Unit 3</u>	Circulating Cooling System	Under operation(18:33 on June 30 -)	24.9
<u>Unit 4</u>	Circulating Cooling System	Under operation(10:08 on July 31 -)	32

- [Unit 2] · 11/6 We started operation of radioactive material decontamination instrument of spent fuel pool.

[Unit 3] · 11/7 14:30 ~ We suspended the alternative cooling in order to clear clogs in the primary strainer resulted from reverse cleaning, as a countermeasure against the alarm suction pressure decrease of

primary coolant system pump in spent fuel pool closed loop cooling system. We stop it about 3 hours, and estimate the temperature of water in the spent fuel pool increases about 0.6 .

[Unit 4] · 8/20 ~ We started operation of desalinating facility of the spent fuel pool.

<Water Injection to Pressure Containment Vessels> (As of November 7 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. 7.8 m <sup>3</sup> /h)	43.4	44.2	121.7 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 3.0 m <sup>3</sup> /h, Core Spray System: Approx. 7.3 m <sup>3</sup> /h)	68.8	72.2	118 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.3 m <sup>3</sup> /h, Core Spray System: Approx. 8.0 m <sup>3</sup> /h)	63.2	70.8	101.5 kPaabs

[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.

End