

Plant Status of Fukushima Daiichi Nuclear Power Station

November 9, 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.
- 11/8 2:20 An alarm worked and indicated decrease of water level in boiler water supply tank. Thus, at 2:24 am on November 8, we manually stopped the boiler of evaporative concentration apparatus in the water desalinations. Then, we stopped evaporative concentration apparatus 3B at 2:28 am and 3C at 2:31 am. 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.  
Thereafter, as a result of the inspection of inlet strainer of boiler make up water transfer pumps (A) and (B), plugging was found due to water scale of filtered water attached to inside of the pipe, after removing those contaminations, evaporated concentration apparatus 3B and 3C was restarted at 17:08 and at 18:01 on the same day respectively. We will continue to operate the apparatus while stop and conduct cleaning of strainer at appropriate timing.
- 11/8 16:23 As allophone was observed from the motor of cesium adsorption treatment water transfer pump (B), cesium adsorption apparatus was stopped. After switched to (A) pump, at 16:54, it was restarted and reached to normal operation flow (approx. 18m<sup>3</sup>/h) at 17:00. We will investigate the cause.

[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) ]	· From 9:38 on November 4 to 15:00 on November 8 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 to 15:05 on November 8 Transferred
Unit 6	· Unit 6T/B Temporary tanks	· From 10:00 to 16:00 on November 9 Transferred

Place transferred	Status of Water Level (As of November 9 at 7:00)
Process Main Building	Water level: O.P.+ 2,127mm(Accumulated total increase:3,344 mm) 119mm decrease since 7:00 on November 8
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,564 mm(Accumulated total increase:3,290 mm) 206mm decrease since 7:00 on November 8

Water level of the vertical shaft of the trench, T/B and R/B (As of November 9 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.+ + 850 mm (No change since 7:00 on November 8)	O.P.+ 3,893 mm (43mm increase since 7:00 on November 8)	O.P.+ 4,549 mm (22mm increase since 7:00 on November 8)
Unit 2	O.P.+ 3,055 mm (46mm increase since 7:00 on November 8)	O.P.+ 3,069 mm (43mm increase since 7:00 on November 8)	O.P.+ 3,153 mm* (37mm increase since 7:00 on November 8)
Unit 3	O.P.+ 3,199 mm (5mm increase since 7:00 on November 8)	O.P.+ 2,980 mm (33mm increase since 7:00 on November 8)	O.P.+ 3,164 mm (28mm increase since 7:00 on November 8)
Unit 4	-	O.P.+ 2,979 mm (13mm decrease since 7:00 on November 8)	O.P.+ 3,004 mm (12mm increase since 7:00 on November 8)

<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	11/8	8:40	ND	0.05	0.06
Approx 330m South of Discharge Channel of 1-4u of 1F	11/8	8:15	ND	0.03	0.04
Around Discharge Channel of 3-4u of 2F	11/8	8:30	ND	0.02	0.02
Approx 7km South of Discharge Channel of 1-2u of 2F	11/8	8:05	ND	0.03	0.02
Around 3km offshore of Numanouchi (Upper Layer)	11/7	6:50	ND	ND	0.01

· Results of nuclide analysis of seawater at 5 offshore points sampled on November 7 are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (As of November 9 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 -)	22.0 *
<u>Unit 2</u>	Circulating Cooling System	Under operation(17:21 on May 31 -)	24.9
<u>Unit 3</u>	Circulating Cooling System	Under operation(18:33 on June 30 -)	22.6
<u>Unit 4</u>	Circulating Cooling System	Under operation(10:08 on July 31 -)	31

\* As of 11/9 5:00 (The latest sampled data is described because of the temperature measuring instrument stop in accordance with the on-site power enhancement work.)

[Unit 1] · 11/9 5:43 ~ We stopped the circulating cooling system of spent fuel pool in accordance with the on-site power enhancement work.

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

· 11/8 16:24 ~ We stopped radioactive material decontamination instrument of spent fuel pool in accordance with the on-site power enhancement work.

· 11/9 5:41 ~ We stopped the circulating cooling system of spent fuel pool in accordance with the on-site power enhancement work.

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

<Water Injection to Pressure Containment Vessels> (As of November 9 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)	40.8	41.8	121.4 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 3.0 m <sup>3</sup> /h, Core Spray System: Approx. 7.2 m <sup>3</sup> /h)	67.8	71.4	115 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.9 m <sup>3</sup> /h, Core Spray System: Approx. 7.9 m <sup>3</sup> /h)	61.8	70.7	101.5 kPaabs

[Unit 2] 11/9 14:10 ~ 16:30 We conducted gas sampling at primary containment vessel gas control system.

[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.
- 10/9 9:22 ~ 12:55 We conducted dust sampling by large crane at the upper part of the reactor building of Unit 3.

End