

Plant Status of Fukushima Daiichi Nuclear Power Station

October 23, 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 started.
- 6/24 12:00 Treatment started at desalination facilities
- 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.
- 10/19 21:06 In the Water Treatment Facility under operation, a SMZ pump of the 4th process line of cesium adsorption apparatus automatically stopped. Water treatment by the cesium adsorption apparatus is continuously operated at the flow rate approx. 17m³/h.
- 10/23 7:52 Due to the alarm indicating the high pressure of the process water in the desalination instrument (RO membrane type: 2-1), it automatically stopped. (RO membrane type: 2-2 was continuously operating.)
8:06 The alarm was reset and the instrument was restarted.

[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	·10:35 on October 22 - Transferring
Unit 2	· Unit 2T/B Central Radioactive Waste Treatment Facility [Process Main Building]	·10:12 on October 20 -Transferring
Unit 3	· Unit 3T/B Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	·10:00 on October 20 -Transferring
Unit 6	·Unit 6T/B Temporary tanks	·October 23 - No plan of transfer
	·Temporary tanks Mega float	·October 23 - No plan of transfer

Place transferred	Status of Water Level (As of October 23 at 7:00)
Process Main Building	Water level: O.P.+ 3,147 mm(Accumulated total increase:4,364 mm) 202mm increase since 7:00 on October 22
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,417 mm(Accumulated total increase:3,143 mm) 8mm decrease since 7:00 on October 22

Water level of the vertical shaft of the trench, T/B and R/B(As of October 23 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.+ 850 mm (No change since 7:00 on October 22)	O.P.+ 4,456 mm (438mm decrease since 7:00 on October 22)	O.P.+ 4,447 mm (91mm increase since 7:00 on October 22)
Unit 2	O.P.+ 2,921 mm (8mm decrease since 7:00 on October 22)	O.P.+ 2,953 mm (7mm decrease since 7:00 on October 22)	O.P.+ 3,039 mm (18mm decrease since 7:00 on October 22)
Unit 3	O.P.+ 3,214 mm (1mm increase since 7:00 on October 22)	O.P.+ 2,979 mm (1mm decrease since 7:00 on October 22)	O.P.+ 3,145 mm (No change since 7:00 on October 22)
Unit 4	-	O.P.+ 3,019 mm (5mm increase since 7:00 on October 22)	O.P.+ 3,039 mm (1mm decrease since 7:00 on October 22)

<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 of 1F	10/22	8:45	ND	1.3	1.2
Approx. 30m North of Discharge Channel of 5-6U of 1F	10/22	14:30	ND	1.0	0.84

· Results of nuclide analysis of seawater, sampled on October 22 at 3 points around the Fukushima coastal area are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (As of October 23 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 -)	24.5
<u>Unit 2</u>	Circulating Cooling System	Under operation(17:21 on May 31 -)	28.0
<u>Unit 3</u>	Circulating Cooling System	Under operation(18:33 on June 30 -)	27.0
<u>Unit 4</u>	Circulating Cooling System	Under operation(10:08 on July 31 -)	35

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

<Water Injection to Pressure Containment Vessels> (As of October 23 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. 3.7 m ³ /h)	70.7	72.5	120.3 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 3.1 m ³ /h, Core Spray System: Approx. 7.0 m ³ /h)	74.4	79.6	123 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.1 m ³ /h, Core Spray System: Approx. 8.1 m ³ /h)	68.5	71.9	101.5 kPaabs

[Unit 4] [Unit 5] [Unit 6] No particular changes in parameters.

<Others>

- 4/10 ~ Clearance of outdoor rubbles by remote control to improve working conditions.
- 6/28 ~ Main construction work for installing the cover for the reactor building of Unit 1
- 8/10 ~ 9/9 Implemented setting up iron framework of the cover for the reactor building of Unit 1
- 9/10 ~ 10/14 Implemented installation of panels of the cover for the reactor building of Unit 1
- 10/15 ~ Continuously implementing the relating work for the installation of the cover for the reactor building of Unit 1.
- 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