

Plant Status of Fukushima Daiichi Nuclear Power Station

October 20, 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 Starting the second cesium adsorption apparatus (B system line) and treating the accumulated water together with the cesium adsorption apparatus and the decontamination instruments.
19:41 reaching the rated flow.
- 10/18 By the reinforcing work for power source for the Water Treatment Facility, the cesium adsorption apparatus was stopped at 6:09 and the second cesium adsorption apparatus was stopped at 9:04.
- 10/19 After completing the reinforcing work for power source for the Water Treatment Facility, the second cesium adsorption apparatus was restarted at 13:29 and the 3rd and 4th process lines of the cesium adsorption apparatus was restarted (flow approx.20m³/h).
- 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.

[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 [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 20, No plan
	·Temporary tanks Mega float	·14:00 -15:00 on October 20 Transferred

Place transferred	Status of Water Level (As of October 20 at 7:00)
Process Main Building	Water level:O.P.+ 2,596 mm(Accumulated total increase:3,813 mm) 15mm decrease since 7:00 on October 19
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level:O.P.+ 2,533 mm(Accumulated total increase:3,259 mm) 395mm decrease since 7:00 on October 19

Water level of the vertical shaft of the trench, T/B and R/B(As of October 20 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P.+ 850 mm (No change since 7:00 on October 19)	O.P.+ 4,910 mm (9mm decrease since 7:00 on October 19)	O.P.+ 4,366 mm (13mm decrease since 7:00 on October 19)
Unit 2	O.P.+ 3,102 mm (69mm increase since 7:00 on October 19)	O.P.+ 3,119 mm (63mm increase since 7:00 on October 19)	O.P.+ 3,192 mm (62mm increase since 7:00 on October 19)
Unit 3	O.P.+ 3,226 mm (21mm increase since 7:00 on October 19)	O.P.+ 3,023 mm (34mm increase since 7:00 on October 19)	O.P.+ 3,181 mm (41mm increase since 7:00 on October 19)
Unit 4	-	O.P.+ 3,018 mm (19mm increase since 7:00 on October 19)	O.P.+ 3,043 mm (9mm increase since 7:00 on October 19)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

- Main 3 nuclide was not detected from 4 sampling points taken in Fukushima Prefecture offshore on October 19.

<Cooling of Spent Fuel Pools> (As of October 20 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 -)	23.0
<u>Unit 2</u>	Circulating Cooling System	Under operation(17:21 on May 31 -)	25.0
<u>Unit 3</u>	Circulating Cooling System	Under operation(18:33 on June 30 -)	24.0
<u>Unit 4</u>	Circulating Cooling System	Under operation(10:08 on July 31 -)	32

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

<Water Injection to Pressure Containment Vessels> (As of October 20 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. 3.6 m ³ /h)	70.3	72.3	121.7 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 3.5 m ³ /h, Core Spray System: Approx. 7.1 m ³ /h)	74.5	80.7	119 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 2.1 m ³ /h, Core Spray System: Approx. 8.0 m ³ /h)	69.7	72.2	101.5 kPaabs

[Unit 4] · 13:01 on October 20 -14:41 Injection of hydrazine (corrosion inhibitor) to the spent fuel pool (Approx.2 m³).

[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
- 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.
- 10/20 At 9:05 am on October 20, we suspended the Auxiliaries Cooling System Seawater Pump in order to inspect the intake canal (room for Auxiliaries Cooling System Seawater Pump) for review of possibility of cleaning. At 9:13 am, we suspended cooling the reactor by stop of the Residual Heat Removal System Pump (D). At 9:18 am, we suspended the Residual Heat Removal System Seawater Pump (D). We started the Auxiliaries Cooling System Seawater Pump at 2:32 pm and the Residual Heat Removal System Seawater Pump (D) at 2:47 pm. We restarted cooling the reactor by the Residual Heat Removal System Pump (D) at 3:02 pm. By this interruption, the water temperature of the reactor has temporarily increased from 22.2 to 31.1 . The temperature of spent fuel pool which the cooling has been stopped has temporarily increased from 25.5 to 26.2 .

End