

Plant Status of Fukushima Daiichi Nuclear Power Station

September 28, 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.
- 9/26 20:30 One of the pumps (H2-2) in the skid for filtering out cesium of the cesium adsorption apparatus shut down.
- 9/27 8:27 The cesium adsorption apparatus stopped for maintenance of water treatment system monitoring system.
- 11:30 We started pump (SMZ-2) in the Skid for filtering out oil and technetium, and the throughput was adjusted to approx. 20 m3/h.

[Storage Facility]

From June 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
2u	•2u Vertical Shaft of Trench → Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	•9/13 9:51~ Transferring
3u	•3u T/B → Central Radioactive Waste Treatment Facility [Process Main Building]	•9/15 9:54~ Transferring
6u	•6u T/B → temporary tanks	•9/28 10:00~16:00 Transferring

Transfer to:	Status of Water Level (as of 7:00 on 9/27)
Process Main Building	Water level: O.P.+ 4,627 mm (Accumulated total increase: 5,844 mm) 34 mm increase from 9/27 7:00
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,033 mm (Accumulated total increase: 2,759 mm) 227 mm increase from 9/27 7:00

◇ Water level at the vertical shaft of the trench and T/B (as of 9/28 7:00)

	Vertical Shaft of Trench	T/B	R/B
1u	O.P. <+850mm (No change since 9/27 7:00)	O.P. +4,990mm (36mm decrease since 9/27 7:00)	O.P. +5,056mm (37mm decrease since 9/27 7:00)
2u	O.P. +2,786mm (1mm increase since 9/27 7:00)	O.P. +2,840mm (No change since 9/27 7:00)	O.P. +2,908mm (1mm increase since 9/27 7:00)
3u	O.P. +3,277mm * (4mm decrease since 9/26 11:00)	O.P. +3,050mm (5mm decrease since 9/27 7:00)	O.P. +3,167mm (2mm decrease since 9/27 7:00)
4u	—	O.P. +3,099mm (1mm increase since 9/27 7:00)	O.P. +3,109mm (3mm decrease since 9/27 7:00)

* As of 15:40 on Sep. 27. (Due to communication error, data was acquired at the site.)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

*Results of nuclide analysis of seawater, sampled on September 27 at 4 points around the Fukushima coastal area and 3 points offshore are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (as of 9/28 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22	24.5°C
2u	Circulating Cooling System	Operating from 5/31 17:21	28.0°C
3u	Circulating Cooling System	Operating from 6/30 18:33	26.5°C
4u	Circulating Cooling System	Operating from 7/31 10:08	34°C

【Unit 2】 9/28 10:39~12:22 Hydrazine injected to the spent fuel pool (approx 2m³) .

【Unit 4】 8/20~ We started operation of desalinating facility of the spent fuel pool.

<Water Injection to Pressure Containment Vessels> (as of 9/28 11:00)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel	Pressure of Primary Containment Vessel
1u	Injecting freshwater (approx. 3.8m ³ /h)	76.0°C	77.9°C	123.3 kPaabs
2u	Injecting freshwater (Feed Water System: approx. 3.8m ³ /h CS System: approx. 6.0 m ³ /h)	92.0°C	101.4°C	109 kPaabs
3u	Injecting freshwater (Feed Water System: approx. 2.8m ³ /h CS System: approx. 8.0 m ³ /h)	75.7°C	79.1°C	101.5 kPaabs

【Unit 1】【Unit 2】【Unit 3】

9/28 10:25 , we switched water injection line to emergency line for the trial run of mini flow line in the regular injection line set on the hill. 14:02, we switched back to the regular water injection line after the trial run.

【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.
- 6/3~ Restoration works of port related facilities has been under operation.
- 7/12~ Construction work of installing steel pipe sheet pile against water leakage in the water intake channel.
- 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 Installment of wall panel for cover of reactor building of Unit 1 started.
- 9/26 In order to repair the outlet valve of Unit 5 residual heat removal system seawater pump (D), we switched the seawater pump from B system (permanently installed) to A system (temporarily installed).
- 9/27 around 11:05 am On the second floor of the turbine building of Unit 5, while draining lubricant oil of overhead crane to drums for inspection of the crane, one of our employees found lubricant oil was leaked on the floor. The amount of the leaked oil was approximately 8 liters. Currently lubricant oil is drained to another drum, and wiping the leaked oil from the floor conducted.

END