

Plant Status of Fukushima Daiichi Nuclear Power Station

September 21, 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.
- 9/19 14:16 As we found water leak from water desalinations (reverse osmosis membrane system) (3), we stopped the operation of water desalinations (2) and (3). The water desalinations (3) was isolated and the water desalinations (2) was restarted at 14:50 on 9/19.
- 9/20 21:47 As it was confirmed that incorrect adsorption tower was installed in No.2 cesium adsorption instruments, the instrument was suspended when switching operation was given to the tower.
- 22:02 The instrument was restarted. At 22:10, it reached the regular water flow.
- 9/21 13:34 The water desalination instrument (reverse osmosis membrane type) (3) was restarted by using another system different from the one that leaked of the 2 systems of process lines.

[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	·9/20 10:00 ~ 16:00 Transferred ·9/21 10:00 ~ Transferring

Transfer to:	Status of Water Level (as of 7:00 on 9/21)
Process Main Building	Water level: O.P.+ 4,577mm (Accumulated total increase: 5,794mm) 39 mm decrease from 9/20 7:00
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 1,840mm (Accumulated total increase: 2,566mm) 95 mm decrease from 9/20 7:00

Water level at the vertical shaft of the trench and T/B (as of 9/20 7:00)

	Vertical Shaft of Trench	T/B	R/B
1u	O.P. <+850mm	O.P. +4,920mm	O.P. +4,809mm

	(No change since 9/20 7:00)	(No change since 9/20 7:00)	(230 mm increase since 9/20 7:00)
2u	O.P. +2,769mm (16mm increase since 9/20 7:00)	O.P. +2,825mm (13mm increase since 9/20 7:00)	O.P. +2,890mm (14mm increase since 9/20 7:00)
3u	O.P. +3,116mm (11mm increase since 9/20 7:00)	O.P. +2,919mm (18mm increase since 9/20 7:00)	O.P. +3,032mm (29mm increase since 9/20 7:00)
4u	-	O.P. +2,948mm (3mm increase since 9/20 7:00)	O.P. +2,976mm (8mm increase since 9/20 7:00)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

* Sampling wasn't/won't be conducted during the period from Sep 17 to 22 due to the typhoon.

<Cooling of Spent Fuel Pools> (as of 9/21 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22	26.5
2u	Circulating Cooling System	Operating from 5/31 17:21	30.5
3u	Circulating Cooling System	Operating from 6/30 18:33	29.3
4u	Circulating Cooling System	Operating from 7/31 10:08	35

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

<Water Injection to Pressure Containment Vessels> (as of 9/21 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. 3.7m ³ /h)	77.4	79.5	122.6 kPaabs
2u	Injecting freshwater (Feed Water System: approx. 3.5m ³ /h CS System: approx. 4.1 m ³ /h)	102.3	110.9	112 kPaabs
3u	Injecting freshwater (Feed Water System: approx. 3.8m ³ /h CS System: approx. 8.1 m ³ /h)	82.0	85.7	101.5 kPaabs

[Unit 1] -9/21 11:40 Adjusted the flow rate of water injection into the reactor to approx. 3.8 m³/h.

[Unit 2] -9/21 11:40 Adjusted the flow rate of water injection into the reactor to approx. 3.8 m³/h from the feed water system and approx. 4.0 m³/h from the core spray system.

[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 Unit1 started.

END