

Plant Status of Fukushima Daiichi Nuclear Power Station

September 5, 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, which was additionally installed to Water Treatment Facility to produce fresh water from concentrated seawater generated at Water Desalination Facility, has started full operation.
- 8/18 14:43 We started operation of the water treatment facility.
(We started treatment of accumulated water at series operation including highly concentrated radioactive materials by cesium adsorption Instrument, 2nd cesium adsorption Instrument and decontamination instrument)
- 15:50 We confirmed flow rate reached normal level, water treatment facility operated stably and operation status had no problem)
- 8/19 19:33 We activated second cesium adsorption facility (System B) and started parallel operation. At 19:41, the flow rate achieved steady state.
- 8/29 7:00 We stopped the operation of the desalination facilities (1B) in order to change filters.
- 8/31 14:00 We started full operation of three evaporative concentration apparatuses which we had additionally installed and conducted commissioning of.
- 9/4 19:44 Considering the current balance between the storage capacity of fresh water and the amount of water injection to reactors, we stopped all of the evaporative concentration apparatuses of water desalination facilities, while desalination (reverse osmosis membrane type) continues.

[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 [Process Main Building]	·8/30 9:39 ~ Transferring
3u	·3u T/B → Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	·8/30 9:54 ~ Transferring
6u	·6u Turbine Building → temporary tanks	·9/5 No Transfer

Transfer to:	Status of Water Level (as of 7:00 on 9/5)
Process Main Building	Water level: O.P.+ 4,558 mm (Accumulated total increase: 5,775mm) 80 mm decrease from 9/4 7:00
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,830 mm (Accumulated total decrease: 3,556mm) 145 mm increase from 9/4 7:00

Water level at the vertical shaft of the trench and T/B (as of 9/5 7:00)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 9/4 7:00	O.P. +4,920mm, No change since 9/4 7:00
2u	O.P. +3,165mm (835mm), 43mm decrease since 9/4 7:00	O.P. +3,211mm, 40mm decrease since 9/4 7:00
3u	O.P. +3,365mm (635mm), 10mm decrease since 9/4 7:00	O.P. +3,192mm, 11mm decrease since 9/4 7:00
4u	-	O.P. +3,226mm, 11mm decrease since 9/4 7:00

- Water level at Unit 1 R/B: 9/5 7:00, O.P. +4,787 mm, 7mm increase since 9/4 7:00.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

*Sampling is suspended from Sep. 1 to 4 due to the tidal wave by Typhoon No.12.

<Cooling of Spent Fuel Pools> (as of 9/5 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22	30.0
2u	Circulating Cooling System	Operating from 5/31 17:21	35.0
3u	Circulating Cooling System	Operating from 6/30 18:33	32.8
4u	Circulating Cooling System	Operating from 7/31 10:08	40

[Unit 2] 9/5 10:59 – 12:47 We injected hydrazine to spent fuel pool (approximately 2m³).

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

<Water Injection to Pressure Containment Vessels> (as of 9/5 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)	90.3	85.4	126.4 kPaabs
2u	Injecting freshwater (approx. 3.8m ³ /h)	106.4	112.0	116 kPaabs
3u	Injecting freshwater (Feed Water system: approx. 7.0m ³ /h CS system: approx. 2.0 m ³ /h)	106.2	97.4	101.5 kPaabs

[Units 3] 9/5 14:34 we adjusted the rate of water injection through reactor feed water system piping arrangement from approx. 7.0 m³/h to approx. 6.0 m³/h. (Water injection through core spray system continues at approx. 3.0 m³/h.)

[Units 4] [Unit 5] [Units 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 Started setting up iron framework of the cover for the reactor building of Unit 1

END