

## Plant Status of Fukushima Daiichi Nuclear Power Station

September 6, 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.
- 9/4 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.
- 9/6 5:51 Decontamination instruments of Waste Treatment Facility stopped with an alarm indicating a mixer trouble\* of High Speed Coagulation Settling Facility. Then we reset and restarted the instruments.
- 6:21 The same alarm and serious fault alarm went off, and the decontamination instruments and cesium adsorption instruments stopped.
- 15:13 As to the cause, it was estimated that the threshold setting of overload current of the mixer was set at lower level than the technical standard, which was close to the normal operation level. We changed the setting and restarted the decontamination instruments and cesium adsorption instruments. At 16:35, the flow rate achieved steady state.

#### [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	·9/6 No Transfer

Transfer to:	Status of Water Level (as of 7:00 on 9/6)
Process Main Building	Water level: O.P.+ 4,491 mm (Accumulated total increase: 5,708mm) 67 mm decrease from 9/5 7:00
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,778 mm (Accumulated total decrease: 3,504mm) 52 mm decrease from 9/5 7:00

Water level at the vertical shaft of the trench and T/B (as of 9/6 7:00)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 9/5 7:00	O.P. +4,920mm, No change since 9/5 7:00
2u	O.P. +3,124mm (876mm), 41mm decrease since 9/5 7:00	O.P. +3,171mm, 40mm decrease since 9/5 7:00
3u	O.P. +3,356mm (644mm), 9mm decrease since 9/5 7:00	O.P. +3,180mm, 12mm decrease since 9/5 7:00
4u	-	O.P. +3,220mm, 6mm decrease since 9/5 7:00

• Water level at Unit 1 R/B: 9/6 7:00, O.P. +4,788 mm, 1mm increase since 9/5 7:00.

[Unit 2] 9/6 10:11 – 14:54 We transferred accumulated water stored in the condenser to the basement of turbine building (approx. 150m<sup>3</sup>).

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

\*Results of nuclide analysis of seawater, sampled at 2 points of Fukushima Pref. coastal area, are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (as of 9/6 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	32.6
4u	Circulating Cooling System	Operating from 7/31 10:08	40

[Unit 2] 9/6 10:03 - 10:42 We temporarily stopped the cooling of Spent Fuel Pool in order to clean up the tank of secondary cooling tower of alternative coolant system for Spent Fuel Pool, Unit 2.

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

<Water Injection to Pressure Containment Vessels> (as of 9/6 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. 3.5m <sup>3</sup> /h)	90.5	85.6	123.8 kPaabs
2u	Injecting freshwater (approx. 3.4m <sup>3</sup> /h)	106.5	112.9	116 kPaabs
3u	Injecting freshwater (Feed Water system: approx. 6.0m <sup>3</sup> /h CS system: approx. 2.0 m <sup>3</sup> /h)	104.0	96.4	101.5 kPaabs

[Units 2] 9/6 16:27 We adjusted the rate of water injection from 3.4 m<sup>3</sup>/h to 3.8 m<sup>3</sup>/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