

# Plant Status of Fukushima Daiichi Nuclear Power Station

June 1, 2011  
Tokyo Electric Power Company

## <Draining Water on Underground Floor of Turbine Building (T/B)>

Unit	Draining water source place transferred	Status
Unit 2	Unit 2 Vertical Shaft of Trench Process Main Building of Central Radioactive Waste Treatment Facility (from 10:08 am, April 19 to 4:01 pm, May 26)	Increase of water level of Process Main Building: 3,893 mm as of 7:00am, June 1 (no change from 7:00, May 31)
Unit 3	Unit 3 Turbine Building Miscellaneous Solid Waste Volume Reduction Treatment Building of Central Radioactive Waste Treatment Facility (from 6:04 pm, May 17~9:10am, May 25)	Increase of water level of Miscellaneous Solid Waste Volume Reduction Treatment Building: 2,853 mm as of 7:00am, June 1 (6 mm increase from 7:00, May 31)
Unit 6	Unit 6 Turbine Building temporary tanks (from May 1 on demand basis)	May 31: no transfer June 1: no plan for transfer

## ◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, June 1)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
Unit 1	O.P. below +850 mm No change from 7:00 am, May 31	O.P. +4,920 mm No change from 7:00 am, May 31
Unit 2	O.P. +3,668 mm (332mm) 62 mm increase since 7:00 am, May 31	O.P. +3,627 mm 60 mm increase since 7:00 am, May 31
Unit 3	O.P. +3,735 mm (265 mm) 29 mm increase since 7:00 am, May 31	O.P. +3,720 mm 24 mm increase since 7:00 am, May 31
Unit 4	—	O.P. +3,698 mm 29 mm increase since 7:00 am, May 31

- Blockage work at the vertical shaft of trench of Unit 3 completed on May 26.
- Blockage work at the vertical shaft of Unit 2 trench underway.

<Monitoring of Radioactive Materials>

◇ Nuclide Analysis of Seawater (Reference purpose)

Density limit by the announcement of Reactor Regulation:

I-131: 40Bq/L, Cs-134: 60Bq/L, Cs-137: 90Bq/L,

Sampling: Everyday

Sampling Location (seacoast)	Date	Time	Ratio to Criteria (times)		
			Iodine-131	Cesium-134	Cesium-137
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	May 31	8:40	ND	0.55	0.39
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	May 31	8:00	ND	0.55	0.43

<Water Injection and Spraying to Spent Fuel Pools>

◇ Results on May 31

【Unit 2】 From 5:21 pm, operation of the circulating cooling system for Spent Fuel Pool began.

◇ Plans on June 1

【Unit 2】 From 6:06 am – 6:53 am, freshwater injection from Spent Fuel Cooling and Filtering System (approx. 25 tons).

※ At 5:06 am, in order to inject water to temporarily stop a pump at the primary system of the circulating cooling system. At 7:06 am, to restart the pump.

【Unit 3】 From 2:34 pm – 4:00 pm, freshwater and hydrazine injection from Spent Fuel Cooling and Filtering System (approx. 50 tons).

Others

– We are conducting detailed nuclide analyses on the water collected on May 8 from the spent fuel pool of Unit 3.

– From May 24, began installation of the circulating cooling system for Spent Fuel Pool, Unit 2.

From May 25, connecting piping

May 30 11:15 am, began the leakage test of the secondary system of the cooling system

3:02 pm: began the test run of the secondary system of the cooling system

May 31 11:40 am, began the leakage test of the primary system of the cooling system

5:21 pm, began circulating cooling (From 1:47 am, June 1, flow rate adjusted to approx 80m<sup>3</sup>/h)

<Water Injection to Reactor Pressure Vessels>

【Unit 1】 Injecting fresh water (approx. 5 m<sup>3</sup>/h):

Reactor pressure vessel temperature:

At 11:00am, June 1, <Feed-water nozzle> 108.4°C

<Bottom of reactor pressure vessel>93.9°C

【Unit 2】 Injecting fresh water (Feed Water line: approx. 4.9m<sup>3</sup>/h)

Reactor pressure vessel temperature:

At 11:00am, June 1, <Feed-water nozzle> 110.2°C

- Since 11:33 am, May 29, injection line has been changed from fire protection system to feed water system (monitoring the temperature trend).
- From 11:59 pm, May 29, we gradually decreased the amount of water injected to the reactor pressure vessel by the fire protection system
- At 6:05 pm, May 30, stopped injection from the fire protection system

**【Unit 3】** Injecting fresh water (Feed Water line approx. 11.5 m<sup>3</sup>/h)

Reactor pressure vessel temperature:

At 11:00am, June 1, <Bottom of reactor pressure vessel> 136.4°C

- Since 4:53 pm, May 12, injection line has been changed from fire protection system to feed water system (monitoring the temperature trend).
- From, 4:01 pm, May 13, we gradually changed the amount of water injected to the reactor pressure vessel through the fire protection system and feed water system.
- At 8:54 pm, May 28, Stopped freshwater injection through fire protection line
- At 10:19 am, May 31, we reduced the amount of water injected to the reactor pressure vessel through the feed water system from 13.5 m<sup>3</sup>/h to 12.5 m<sup>3</sup>/h.
- At 10:10 am, June 1, we reduced the amount of water injected to the reactor pressure vessel through the feed water system from 12.5 m<sup>3</sup>/h to 11.5 m<sup>3</sup>/h.

**【Unit 4】**【Common spent fuel pool】No particular changes on parameters.

**【Units 5】** Reactor cold shutdown.

**【Units 6】** Reactor cold shutdown. No particular changes on parameters.

<Injection of Nitrogen Gas to the Primary Containment Vessel of Unit 1 (PCV)>

◇Injection of nitrogen gas

- From 1:31 am, April 7, we started to inject nitrogen gas to PCV using temporary nitrogen generators.
- D/W pressure: 156.3 kPaabs (1:20am, April 7) -> 127.7 kPaabs, (11:00am, June 1) Injected amount of nitrogen gas was approx. 36,300m<sup>3</sup>.

<Others>

- Since April 10, we have been clearing outdoor rubbles by a remote control to improve working environment.
- Since April 26, we are continuing to spray the dust inhibitor. (On May 29, sprayed in the area of approx. 8,750m<sup>2</sup>. On May 30, we did not spray due to the rain.).
- Since May 9, we commenced preparation work for installing support structure into the bottom of fuel spent pool of reactor building of Unit 4.
- Since May 10, we commenced clearing of rubble in front of carry-in gate for large stuff of reactor building of Unit 3 by using robots.
- Since May 13, preparation work for installation of a cover for the reactor building of Unit 1.
- Since May 30, we have been installing the circulating seawater cleaning system.
- At 8:00 am, May 31, we found oil spillage on the surface of seawater around the curtain wall of the water intake for Units 5 & 6. In order to prevent dispersion of oil to outer sea, we are preparing to install the oil fence.

2:00 pm: finished installation of absorption mats around the protection shore.

4:50 pm: finished installation of the oil fence.

10:00-10:30 am: conducted remedial work to the oil spillage.

END