

Plant Status of Fukushima Daiichi Nuclear Power Station

May 31, 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: 3,892 mm as of 7:00am, May 31 (1mm increase from 7:00, May 30)
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: 2,847 mm as of 7:00am, May 31 (19 mm decrease from 7:00, May 30)
Unit 6	Unit 6 Turbine Building temporary tanks (from May 1 on demand basis)	May 30: approx. 300m ³ May 31: no plan

◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, May 30)

	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 30	O.P. +4,920 mm No change from 7:00 am, May 30
Unit 2	O.P. +3,606 mm (394mm) 86 mm increase since 7:00 am, May 30	O.P. +3,567 mm 86 mm increase since 7:00 am, May 30
Unit 3	O.P. +3,706 mm (294 mm) 65 mm increase since 7:00 am, May 30	O.P. +3,696 mm 56 mm increase since 7:00 am, May 30
Unit 4	—	O.P. +3,669 mm 59 mm increase since 7:00 am, May 30

- 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 Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	May 30	7:55	ND	0.50	0.36

We cancelled the sampling for other points due to bad weather

<Water Injection and Spraying to Spent Fuel Pools>

◇ Results on May 30

【Unit 2】 From 12:06 pm – 1:52 pm, freshwater injection from Spent Fuel Cooling and Filtering System (approx. 53 tons).

◇ Plans on May 31

【Unit 2】 We will conduct the test run of the circulating cooling system and will move on to the operation.

◇ Others

- We are conducting detailed nuclide analyses on the water collected on April 12 from the spent fuel pool of Unit 4.
- We are conducting detailed nuclide analyses on the water collected on April 16 from the skimmer surge tank of Unit 2.
- 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

<Water Injection to Reactor Pressure Vessels>

【Unit 1】 Injecting fresh water (approx. 6 m³/h):

Reactor pressure vessel temperature:

At 11:00am, May 31, <Feed-water nozzle> 108.2°C

<Bottom of reactor pressure vessel>93.5°C

【Unit 2】 Injecting fresh water (Feed Water line: approx. 5 m³/h)

Reactor pressure vessel temperature:

At 11:00am, May 31, <Feed-water nozzle> 110.4°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 (from 12:01 am, May 30 : 2m³/h, from 10:38 am, May 30: 1m³/h)
- At 6:05 pm, May 30, stopped injection from the fire protection system

【Unit 3】 Injecting fresh water (Feed Water line approx. 12.5 m³/h)

Reactor pressure vessel temperature:

At 11:00am, May 31, <Bottom of reactor pressure vessel> 126.1℃

- 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 extinction 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 m³/h to 12.5 m³/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) -> 126.8 kPaabs, (11:00am, May 31) Injected amount of nitrogen gas was approx. 35,650m³.

<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. 8,750m². 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.
- At 2:30 pm, May 31, big sound was confirmed at the southern side of the reactor building of Unit 4, where wireless unmanned heavy machineries were removing rubbles. It seemed that the unmanned heavy machinery tugged and broke some cylinder. Nobody got injured. There was no change in the data of the monitoring post.

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