

Plant Status of Fukushima Daiichi Nuclear Power Station

May 25th, 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)	Increase of water level of Process Main Building: 3,761 mm as of 7:00, May 25 (122 mm increase from 7:00, May 24)
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)	Increase of water level of Miscellaneous Solid Waste Volume Reduction Treatment Building: 3,080 mm as of 7:00, May 25 (368 mm increase from 7:00, May 24)
Unit 6	Unit 6 Turbine Building temporary tanks (from May 1 on demand basis)	May 24: approx. 200m ³ May 25: planned transfer from approx. 9:00 am (approx. 400m ³)

◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, May 25)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
Unit 1	O.P. +1,020 mm (2,980 mm) No change since 7:00 am, May 24	O.P. +5,050 mm No change since 7:00 am, May 24
Unit 2	O.P. +3,242 mm (758mm) 22 mm increase since 7:00 am, May 24	O.P. +3,212 mm 8 mm decrease* since 7:00 am, May 24
Unit 3	O.P. +3,490 mm (510 mm) 140 mm increase since 7:00 am, May 24	O.P. +3,475 mm 135 mm increase* since 7:00 am, May 24
Unit 4	—	O.P. +3,471 mm 9 mm decrease *since 7:00 am, May 24

* from May 25 data for Unit 2 to 4 were from hydraulic water level gauges (digital) minimum digit was changed to 1mm.

- Blockage work at the vertical shaft of trench has been implemented at Unit 2 and Unit 3.

<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
Approx. 30m north to Discharge Canal of Units 5 & 6 of Fukushima Daiichi	May 24	9:25/14:00	ND/0.25	0.85/1.4	0.58/0.88
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi.	May 24	9:10/13:40	ND/ND	0.78/0.88	0.54/0.61
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	May 24	8:45	ND	0.22	0.18
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	May 24	8:05	ND	0.42	0.22
Approx. 3km from the offshore of Haramachi-ku, Minami Soma City.	May 24	9:00	ND	ND	ND
Approx. 3km from the offshore of Kodaka-ku, Minami Soma City.	May 24	9:10	ND	0.18	0.11
Approx. 8km from the offshore of Iwasawa seashore, Naraha Town.	May 24	7:10	ND	0.23	0.19
Approx. 8km from the offshore of Kodaka-ku, Minami Soma City.	May 24	8:50	ND	ND	0.23
Approx. 8km from the offshore of Iwasawa seashore, Naraha Town.	May 24	7:35	ND	0.20	0.10
Approx. 15km from the offshore of Minami Soma City.	May 24	8:30	ND	ND	ND
Approx. 15km from the offshore of Ukedo river, Namie Town	May 24	8:15	ND	0.16	0.09
Approx. 15km from the offshore of Fukushima Daiichi	May 24	8:10	ND	0.13	0.14
Approx. 15km from the offshore of Fukushima Daini	May 24	7:35	ND	ND	ND
Approx. 15km from the offshore of Iwasawa seashore, Naraha Town.	May 24	7:10	ND	ND	ND
Approx. 15km from the offshore of Hirono Town.	May 24	6:55	ND	ND	ND

* all number: Upper Layer

<Water Injection and Spraying to Spent Fuel Pools>

◇ Result on May 24

【Unit 3】 From 10:15 am - 1:35 pm, we injected freshwater and hydrazine from Spent Fuel Cooling and Filtering System (approx. 100 tons).

◇ Result on May 25

【Unit 4】 From 4:00 pm, we plan to spray freshwater and hydrazine by the concrete pumping vehicle.

◇ 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.

<Water Injection to Reactor Pressure Vessels>

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

Reactor pressure vessel temperature:

At 9:00am, May 25, <Feed-water nozzle> 115.4°C

<Bottom of reactor pressure vessel>96.7°C

【Unit 2】 Injecting fresh water (approx. 7 m³/h)

Reactor pressure vessel temperature:

At 9:00am, May 25, <Feed-water nozzle> 111.7°C

【Unit 3】 Injecting fresh water (Fire Protection System approx. 3 m³/h + Feed Water System approx. 13.5 m³/h)

Reactor pressure vessel temperature:

At 11:00am, May 25, <Bottom of reactor pressure vessel> 109.7°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 2:15 pm, May 20, we changed the amount of water injected to the reactor pressure vessel by the feed water system from 9m³/h to 12m³/h.
- From 5:39 pm, May 20, we gradually decreased the amount of water injected to the reactor pressure vessel by the fire protection system (from 5:00 am, May 21st : 6m³/h, from 11:31 am, May 23: 5m³/h, from 2:08 pm, May 23: 4m³/h, from 5:19 pm, May 23: 3m³/h)

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

【Units 5/6】 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.
- Approx. 2:00 pm on May 21, nitrogen supply was stopped as a result of a trip of compressors due to high temperature. At 5:11 pm, we started up a back-up nitrogen generator to resume nitrogen supply at approx. 20 m³/h (it was adjusted to approx. 26 m³/h before 8:31 pm).
- At 11:23 am, May 22, we started up nitrogen generators planned to be used at Units 2 and 3 and resumed nitrogen supply at approx. 28 m³/h
- From 9:14 am to 9:18 am, May 25, we temporarily stopped nitrogen injection due to change of power source associated with stoppage of temporary power panel (Then nitrogen injection was resumed).

- D/W pressure: 156.3 kPaabs (1:20am, April 7) -> 133.4 kPaabs, (9:00am, May 25)
Injected amount of nitrogen gas was approx. 31,700m³.

<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 24, sprayed in the area of approx. 14,750m². On May 25, we are spraying the dust inhibitor around Noninflammables Treatment Facility and east sides of the turbine building of Unit 3).
- May 9, we commenced preparation work for installing support structure into the bottom of fuel spent pool of reactor building of Unit 4.
- May 10, commenced clearing of rubble in front of carry-in gate for large stuff of reactor building of Unit 3 by using robots.
- May 12, reinforcement work of power source line of Unit 3 and 4
- May 13, preparation work for installation of a cover for the reactor building of Unit 1.
- May 21, the Mega Float arrived in Fukushima Daiichi port and berthed at the shallow draft quay.
- May 24, we started installing major equipments such as heat exchange units regarding installing cyclic cooling system for spent fuel pool at Unit 2. (Planned commencement of cooling: May 31)
- May 25, power center (2C system) is planned to be stopped due to the structure change of onsite power system. (load: pump to transfer accumulated water in Unit 2 reactor building, reactor survey gauges in Unit 1 and 2, survey camera for accumulated water in Unit 1 and 2 turbine buildings)

END