

## Plant Status of Fukushima Daiichi Nuclear Power Station

June 27, 2011

Tokyo Electric Power Company

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

◇ Construction status of accumulated radioactive water treatment system and storage tank facility

#### [Treatment Facility]

- 6/17 20:00～ Full operation started.
- 6/23 0:43～ Passing water test started at water treatment facilities with high radiation water
- 6/24 12:00～ Water treatment started at water desalination facilities
- 6/25 15:24 Water treatment was reactivated after automatically tripped.  
16:10 Water treatment automatically tripped again.  
16:35 We confirmed that the trip was triggered by “water level low” at the oil separator. We selected the other water level gauge with the same automatic trip function and restarted the water treatment facilities.

Water treatment was temporarily suspended for the flashing to change vessels during 13:00-14:00 on June 23, 10:00-12:50 on June 24, 10:00-15:00 on June 25, 10:00-18:10 on June 26.

#### [Storage Facility]

■ June 8, big tanks to store and to keep treated or contaminated water being transferred and installed sequentially

□ Accumulated water in vertical shafts of trenches and at basement level of building (as of 6/27 7:00)

Unit	Draining water source → Place transferred	Status
2u	2u Vertical Shaft of Trench → Process Main Building, Central Radioactive Waste Treatment Facility (4/19 10:08am～5/26 4:01pm, 6/4 6:39pm～6/8 2:20pm, 6/8 6:03pm～6/16 8:40am, 6/22 9:56am～ )	[Process Main Building] Water level: O.P.+4,885 mm (73mm decrease from 6/26 7:00am)
3u	3u T/B → Miscellaneous Solid Waste Volume Reduction Treatment Building of Central Radioactive Waste Treatment Facility (5/17 18:04～5/25 9:10, 6/18 13:31～6/20 0:02) 3u T/B → Process Main Building of Central Radioactive Waste Treatment Facility (6/14 10:05am～6/16 8:46am, 6/21 3:32pm～ )	Accumulated total increase : 6,102mm  [Miscellaneous Solid Waste Volume Reduction Treatment Building] Water level: O.P.+3,115mm
6u	6u Turbine Building → temporary tanks (5/1～6/22 on demand basis)	(20mm increase from 6/27 7:00am) Accumulated total increase:3,803mm

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□ Water level at the vertical shaft of the trench and T/B (as of 6/27 7:00)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 6/26 7:00am	O.P. +4,920 mm, No change since 6/26 7:00am
2u	O.P. +3,647mm (329mm), 24mm decrease since 6/26 7:00am	O.P. +3,644mm, 18mm decrease since 6/26 7:00am
3u	O.P. +3,834mm (163mm), 3mm decrease since 6/26 7:00am	O.P. +3,785mm 5mm decrease since 6/26 7:00am
4u	—	O.P. +3,793mm, 7mm decrease since 6/26 7:00am

- Water level at Unit 1 R/B: 6/27 7:00am, O.P. +4,494mm, 68mm increase since 6/26 7:00am.
- Unit 2 and 3, blockage to the extension of the pit and the unidentified flow path is underway.  
(Blockage work of pits similar to outflow event or whose closure would ensure flow routes completed by 6/10)

<Monitoring of Radioactive Materials >

◇ Nuclide Analysis of Seawater (Reference)

Density limit by the announcement of Reactor Regulation: I-131: 40Bq/L\*, Cs-134: 60Bq/L, Cs-137: 90Bq/L

Sampling Location	Date	Time	Ratio to Criteria (times)		
			Iodine-131	Cesium-134	Cesium-137
30m north of 5 ~ 6u Discharge Canal, Fukushima Daiichi	6/26	9:05am/1:55pm	ND/ND	0.72/0.57	0.61/0.40
330m south of 1 ~ 4u Discharge Canal, Fukushima Daiichi	6/26	8:40am/1:35pm	ND/ND	0.27/0.33	0.16/0.17
Around north water discharge channel, Fukushima Daini (10km from Fukushima Daiichi)	6/26	8:15am	ND	0.08	0.08
Iwasawa shore, Naraha town (16km from Fukushima Daiichi)	6/26	7:55am	ND	ND	0.05

All the data of following 6 locations (14 points in total: offshore of Numanouchi 15km and 30km were for Upper/Middle/Lower Layer, Others were for Upper/Lower Layer) were below the detectable limit; Offshore of Ukedo River Namie Town 15km, Offshore of Fukushima Daiichi 15km, Offshore of Fukushima Daini 15km, Offshore of Numanouchi 5, 15, 30km

<Water Injection and Spraying to Spent Fuel Pools>

Results	Unit 3	From 9:56 am to 11:23 am, injected boric-acid solution by Fuel Pool Cooling and Clean up System. (approx 45t)
Plans	Unit 3	From 3:00 pm, injected boric-acid solution by Fuel Pool Cooling and Clean up System is planned.

- 5/31~, circulating cooling system for 2u Spent Fuel Pool in service. Pool water temperature 6/27 7:30am: 32□

Due to the internal power line switch, from 8:23 am on June 27, the operation of Fuel Pool Cooling and Clean up System was temporarily suspended.

<Water Injection to Reactor Pressure Vessels> (as at 6/27 7:30\*)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 4m <sup>3</sup> /h)	115.9°C	100.8°C
2u	Injecting freshwater (approx. 3.5m <sup>3</sup> /h)	109.7°C	119.5°C
3u	Injecting freshwater (approx. 9.0~9.1m <sup>3</sup> /h)	154.6°C*	129.1°C*

【Unit 4】Units 5【Units 6】【Common spent fuel pool】No particular changes on parameters.

As data collection was not available due to the internal power line switch, the data is as of 7:30 am. The data of Unit 3 temperature is as of 11:00 am.

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

- Primary Containment Vessel pressure: 156.3 (4/7 1:20am) → 139.0 kPaabs, (6/27 7:30pm) approx. 53,500m<sup>3</sup>.

\*Due to the internal power line switch, from 8:51 am to 3:07 pm on June 27, the operation of Nitrogen Injection system was temporarily suspended.

<Others>

- 4/10 ~ Clearance of outdoor rubbles by a remote control to improve working conditions.
- 4/26~ Spraying dust inhibitor in the site of the power station. (6/26, north side of Unit 6 turbine building, etc, approx.4,490m<sup>2</sup>, 6/27, west side of Unit 5 and 6 reactor building,).
- 5/10 ~ Clearing of rubble in front of carry-in gate for large stuff of reactor building of Unit 3 by robots.
- 5/13~ Preparation work for installation of Reactor Building Cover of Unit 1.
- 6/3~ Restoration works of port related facilities carried out.
- 6/7~6/20 Installation of support structure into the bottom of fuel spent pool of reactor building of Unit 4.
- 6/21~ Concrete filling and grout started.
- 6/25 Airflow survey was conducted near the airlock and the large equipment carry-in entrance, R/B, Units 1&2.
- 6/27 Following the completion of Okuma line 2 stoppage work (June 20 to 26) in order to conduct repair of Unit 1 and 2 switching station, the internal power line switch is being conducted.

END