

## Plant Status of Fukushima Daiichi Nuclear Power Station

June 12, 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

From June 4, radioactive accumulated water treatment system water flow test is underway -> Planned Cesium adsorption Instruments (Kurion) stand-alone commissioning -> Planned Decontamination instruments (AREVA) stand-alone commissioning -> Planned Unite commissioning -> Planned full treatment start-up

From June 8, Big storage tanks for storage and treatment contaminated water are being transferred and installed sequentially.

◇Treatment status of accumulated radioactive water from trenches vertical shafts and basement level of each buildings

Unit	Draining water source -> place transferred	Status
Unit 2	Unit 2 Vertical Shaft of Trench -> Process Main Building of Central Radioactive Waste Treatment Facility (10:08 am, April 19 ~ 4:01 pm, May 26 and 6:39 pm, June 4 ~ 2:20 pm, June 8, 6:03 pm, June 8 ~)	Increase of water level of Process Main Building: 5,325 mm as of 7:00 am, June 12 (240 mm increase from 7:00 am, June 11)  Increase of water level of Miscellaneous Solid Waste Volume Reduction Treatment Building:
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) Unit 3 Turbine Building -> Process Main Building of Central Radioactive Waste Treatment Facility (3:30pm, June 11~)	3,027mm as of 7:00am, June 12 (11 mm increase from 7:00 am, June 11)
Unit 6	Unit 6 Turbine Building temporary tanks (from May 1 on demand basis, from 2:45 pm on June 5 to 6:00 pm on June 8, from 9:00 am on June 9 on demand basis, and from 10:00 am to 3:00 pm on June 12)	

◇ Water level at the vertical shaft of the trench and T/B (As of 7:00 am, June 12)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
Unit 1	O.P. below +850 mm (>3,150mm) No change from 7:00 am, June 11	O.P. +4,920 mm No change from 7:00 am, June 11
Unit 2	O.P. +3,733 mm (267mm) 17 mm decrease since 7:00 am, June 11	O.P. +3,709 mm 16 mm decrease since 7:00 am, June 11
Unit 3	O.P. +3,815 mm (185 mm) 2 mm decrease since 7:00 am, June 11	O.P. +3,795 mm 10mm decrease since 7:00 am, June 11
Unit 4	—	O.P. +3,795mm 2 mm increase since 7:00 am, June 11

Water level at Unit 1 Reactor Building: as of 7:00 am on June 12, O.P. +4,491mm, 2mm decrease since 7:00 am, June 11

- Blockage work at and pit of Unit 2, 3 finished on June 10.

\* Water level (as of 7:00am, June 11) in Unit 2 Turbine Building described as “O.P.+3720mm” on the paper of June 11 turned out to be “O.P.+3725mm”. We correct it and apologize for the error.

<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 Location	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	6/11	9:00/14:00	ND/ND	0.52/0.42	0.38/0.49
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi	6/11	8:40/13:40	ND/ND	0.50/0.45	0.34/0.36
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	6/11	9:20	ND	0.10	0.06
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	6/11	7:50	ND	ND	ND

※ 1 Analyses Results Left: Upper Layer, Right: Lower Layer

※ 2 Analyses Results Left: Upper Layer, Middle: Middle Layer, Right: Lower Layer

<Water Injection and Spraying to Spent Fuel Pools>

◇ Results on June 11: None

◇ Plan on June 12: None

◇ Others

- From May 31, cooling using the circulating cooling system for Spent Fuel Pool, Unit 2 is underway.

Spent fuel pool temperature (5:00 pm May 31) 70°C → (11:00 am June 12) 32°C

### <Water Injection to Reactor Pressure Vessels>

【Unit 1】 Injecting freshwater (reactor feed water system: 5 m<sup>3</sup>/h):

At 11:00am, June 12, <Feed-water nozzle> 114.6°C

<Bottom of reactor pressure vessel>98.4°C

【Unit 2】 Injecting freshwater (reactor feed water system:5m<sup>3</sup>/h)

At 11:00am, June 12, <Feed-water nozzle> 108.4°C

【Unit 3】 Injecting freshwater (reactor feed water system: 11.5 m<sup>3</sup>/h)

At 11:00am, June 12, <Bottom of reactor pressure vessel> 181.0°C

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

【Units 5】 【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.
- Primary Containment Vessel pressure: 156.3 (1:20am, April 7) → 132.8kPaabs, (2:00pm, June 12) approx. 43,700m<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 dust inhibitor in the site of the power station. (On June 11, approx. 4375m<sup>2</sup>. On June 12, No work ).
- From May 9 to June 6, we commenced preparation work for installing support structure into the bottom of fuel spent pool of reactor building of Unit 4.
- Since June 7, installation and construction of post material made of steel are commenced.
- 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.
- Since June 3, we have been carrying out restoration works of port related facilities
- On June 9 Advance inspection of nitrogen injection work to Unit 3 Primary Containment Vessel was implemented (we implemented duct sampling, radiation dose measure by  $\gamma$  camera, etc, within the reactor building)
- On June 10, we entered the area reactor building Unit 4(preliminary survey for installation of circulating seawater purification facility)
- On June 11, we started the work to improve inside working environment of Unit 2 Reactor Building.  
At 12:39 pm, we opened air-lock double doors of Reactor Building and started to operate local exhausters from 12:39 pm.
- We open the double door On June 11, 12:39 and started operation local exhausters from 12:42.

END