

## Plant Status of Fukushima Daiichi Nuclear Power Station

June 10, 2011

Tokyo Electric Power Company

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

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

- From June 4, radioactive accumulated water treatment system water flow test is underway  
     Big storage tank for contaminated water treat water on passage

#### [Future plans]

- From June 10, Cesium absorption Instruments (Kurion) stand-alone commissioning -> Decontamination instruments (AREVA) stand-alone commissioning -> Unite commissioning -> Planned treatment start-up (around June 15)

Treatment status of radioactive accumulated 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 f6:39 pm, June 4 ~ 2:20 pm, June 8, 6:03 pm, June 8 ~ )	Increase of water level of Process Main Building:  4,857 mm as of 7:00 am, June 10 (180 mm increase from 7:00 am, June 9)
	Unit 2 Vertical Shaft of Trench -> Unit 2 condenser (from 6:39 pm, June 3 to 12:28 pm, June 4)	
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:  3,003mm as of 7:00am, June 10 (12 mm increase from 7:00 am, June 9)
Unit 6	Unit 6 Turbine Building temporary tanks (from May 1 on demand basis, from 2:00 pm, June 2 to 2:00 pm, June 5 and from 2:45 pm, June 5 ~ 6:00 pm June 8, 9:00 June 9 ~ )	

Water level at the vertical shaft of the trench and T/B (As of 7:00 am, June 10)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
Unit 1	O.P. below +850 mm (>3,150mm)	O.P. +4,920 mm

	No change from 7:00 am, June 9	No change from 7:00 am, June 9
Unit 2	O.P. +3,770 mm (230mm) 17 mm decrease since 7:00 am, June 9	O.P. +3,739 mm 14 mm decrease since 7:00 am, June 9
Unit 3	O.P. +3,794 mm (206 mm) 15 mm decrease since 7:00 am, June 9	O.P. +3,782 mm 30mm increase since 7:00 am, June 9
Unit 4	-	O.P. +3,769mm 10 mm increase since 7:00 am, June 9

Water level at the reactor building in Unit : June 10 7:00 am, O.P. +4,497mm, 1mm decrease since 7:00 am, June 9

- Blockage work at and pit of Unit 2, 3 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 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	6/9	8:25/13:40	ND/ND	0.62/0.62	0.21/0.37
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi	6/9	9:10/13:25	ND/ND	0.55/0.47	0.31/0.31
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	6/9	8:20	ND	0.27	ND
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	6/9	7:55	ND	0.23	ND
Approx. 3km from the offshore of Haramachi Ward, Minamisoma City	6/9	8:45/8:45	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Odaka Ward, Minamisoma City	6/9	9:00/9:00	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Iwasawa Seashore, Naraha Town	6/9	7:55/7:55	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of northern part of Iwaki City	6/9	6:15/6:15	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Natsui River of Iwaki City	6/9	5:55/5:55	ND/ND	0.09/ND	0.08/0.06
Approx. 3km from the offshore of Onahama Port, Iwaki City	6/9	6:00/6:00	ND/ND	ND/ND	ND/ND
Approx. 3km from Ena, Iwaki City	6/9	6:20/6:20	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Numanouchi of Iwaki City	6/9	5:40/5:40	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Toyoma of Iwaki City	6/9	5:25/5:25	ND/ND	ND/ND	ND/ND

Approx. 3km from the offshore of Takadokobama Seashore, Ibaraki prefecture	6/7	8:43/8:41	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Kujihama Seashore, Ibaraki prefecture	6/8	8:50/8:48	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Oarai Seashore, Ibaraki prefecture	6/8	13:40/13:36	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Hirai Seashore, Ibaraki prefecture	6/7	10:32/10:35	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Hasaki Seashore, Ibaraki prefecture	6/7	7:49/7:52	ND/ND	ND/ND	ND/ND
Approx. 8km from the offshore of Odaka Ward, Minamisoma City	6/9	9:15/9:15	ND/ND	ND/ND	ND/ND
Approx. 8km from the offshore of Iwasawa, Naraha Town	6/9	8:20/8:20	ND/ND	ND/ND	ND/ND

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

<Water Injection and Spraying to Spent Fuel Pools>

Results on June 9

[Unit 3] From 1:42 pm to 3:31 pm, sprayed freshwater and hydrazine from Fuel Pool Cooling and Filtering System (approx. 55t).

Plan on June 9

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 (11:00 am June 10) 31

<Water Injection to Reactor Pressure Vessels>

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

At 11:00am, June 10, <Feed-water nozzle> 115.2

<Bottom of reactor pressure vessel> 98.8

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

At 11:00am, June 10, <Feed-water nozzle> 108.48

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

At 11:00am, June 10, <Bottom of reactor pressure vessel> 188.1

[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) 132.3kPaabs, (11:00am, June 10) approx. 42,400m<sup>3</sup>.

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#### <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 9, approx. 8,750m<sup>2</sup>. On June 10, spraying near the welfare building by ordinary method, etc.) (approx. 11,750 m2).
- 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 9, enter the area reactor building (preliminary survey for installation of circulating seawater purification facility)

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