

## Plant Status of Fukushima Daiichi Nuclear Power Station

May 16<sup>th</sup>, 2011  
Tokyo Electric Power Company

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

- From 10:08 am, April 19<sup>th</sup>, water has been transferred from the vertical shaft of the trench of Unit 2 to Central Radioactive Waste Treatment Facility:  
(Process Main Building: Increase of water level from the start: 2,696 mm (as of 7:00, May 16))
- From May 10<sup>th</sup>, installing a transferring line to the area of Unit 3 turbine building started. On May 12<sup>th</sup>, a leakage check has completed.
- From May 1<sup>st</sup>, draining water of the basement of Unit 6 turbine building has been transferred to temporary tanks.  
(May 14<sup>th</sup>, approximately 100m<sup>3</sup>, May 15<sup>th</sup> 100m<sup>3</sup>, May 16<sup>th</sup> from 10am 80m<sup>3</sup> transferred approximately 100m<sup>3</sup>).

Water level at the vertical shaft of the trench and T/B (As of 7:00 am, May 16<sup>th</sup>)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
Unit 1	O.P. +1,090 mm (2,910 mm) (*) No change since 7:00 am, May 15 <sup>th</sup>	O.P. +5,050 mm No change since 7:00 am, May 15 <sup>th</sup>
Unit 2	O.P. +3,240 mm (760 mm) No change since 7:00 am, May 15 <sup>th</sup>	O.P. +3,230 mm No change since 7:00 am, May 15 <sup>th</sup>
Unit 3	O.P. +3,300 mm (670 mm) 30 mm increase since 7:00 am, May 15 <sup>th</sup>	O.P. +3,310 mm 30 mm increase since 7:00 am, May 15 <sup>th</sup>
Unit 4	-	O.P. +3,450 mm 50 mm increase since 7:00 am, May 15 <sup>th</sup>

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

\* Correction due to misread the site indicator (on and after 5:00 pm on May 12<sup>th</sup>) correct: O.P. from +1,080 mm to 1,090 mm; error: O.P. from +980 mm to 990 mm

### <Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference purpose)

Density limit by the announcement of Reactor Regulation:

I-131 : 0.04Bq/cm<sup>3</sup> , Cs-134 : 0.06Bq/cm<sup>3</sup> , Cs-137 : 0.09Bq/cm<sup>3</sup>

Sampling: Everyday

Sampling Location (seacoast)	Date	Time	Ratio to Criteria (times)		
			Iodine-131	Cesium-134	Cesium-137
Approx. 30m north to Discharge Canal of	5/15	9:05/14:05	0.33/ND	1.7/1.1	1.1/0.88

Units 5 & 6 of Fukushima Daiichi					
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi.	5/15	8:45/13:50	0.12/ND	1.1/1.1	0.76/0.76
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	5/15	8:30	ND	0.57	0.24
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	5/15	7:55	ND	0.60	0.42
Approx. 3km from the offshore of Haramachi Ward, Minamisoma City*	5/15	9:20/9:20	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Odaka Ward, Minamisoma City*	5/15	9:40/9:40	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Iwasawa, Naraha Town*	5/15	7:20/7:30	ND/ND	0.27/0.25	0.19/0.13
Approx. 8km from the offshore of Odaka Ward, Minamisoma City*	5/15	10:00/10:00	ND/ND	ND/ND	ND/ND
Approx. 8km from the offshore of Iwasawa, Naraha Town*	5/15	11:35/11:35	ND/ND	0.11/0.16	0.09/0.07
Approx. 15km from the offshore of Minamisoma City	5/15	8:45	ND	ND	ND
Approx. 15km from the offshore of Ukedo River, Namie Town	5/15	10:10	ND	0.16	0.09
Approx. 15km from the offshore of Fukushima Daiichi	5/15	8:40	ND	0.12	0.06
Approx. 15km from the offshore of Fukushima Daini	5/15	9:10	ND	0.27	0.14
Approx. 15km from the offshore of Iwasawa Seashore, Naraha Town	5/15	8:25	ND	0.08	ND
Approx. 15km from the offshore of Hirono Town	5/15	7:55	ND	0.11	0.10

\* Result: Left Number: Upper Layer, Right Number: Lower Layer

### <Water Injection and Spraying to Spent Fuel Pools>

Result on May 15<sup>th</sup>

[Unit 4] From 4:25 pm to 8:25 pm, May 15<sup>th</sup>, we sprayed fresh water and hydrazine with the concrete pumping vehicle.

Plan on May 16<sup>th</sup>

[Unit 3] We are planning to inject fresh water and hydrazine through Fuel Pool Cooling and Filtering System.

#### Others

- We are conducting detailed nuclide analyses on the water collected on April 12<sup>th</sup> from the spent fuel pool of Unit 4.
- We are conducting detailed nuclide analyses on the water collected on April 16<sup>th</sup> from the skimmer surge tank of Unit 2.
- We are conducting detailed nuclide analyses on the water collected on May 8<sup>th</sup>

from the spent fuel pool of Unit 3.

#### <Water Injection to Reactor Pressure Vessels>

[Unit 1] Injecting fresh water (8.0 m<sup>3</sup>/h):

Reactor pressure vessel temperature:

At 11:00am, May 16<sup>th</sup>, <Feed-water nozzle> 94.6

<Bottom of reactor pressure vessel>83.1

[Unit 2] Injecting fresh water (7.0 m<sup>3</sup>/h)

Reactor pressure vessel temperature:

At 11:00am, May 16<sup>th</sup>, <Feed-water nozzle> 113.4

[Unit 3] Injecting fresh water (Fire Protection System 9.0 m<sup>3</sup>/h + Feed Water System 6.0 m<sup>3</sup>/h)

Reactor pressure vessel temperature:

At 11:00am, May 16<sup>th</sup>, <Bottom of reactor pressure vessel> 133.2

Since 4.35 pm, May 12<sup>th</sup>, injection line has been changed from fire protection system to feed water system. (under monitoring the temperature)

From 2:33 pm to 5:00pm, May 15<sup>th</sup>, boric acid was injected to the reactor (approx. 180kg).

[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<sup>th</sup>, we started to inject nitrogen gas to PCV using temporary nitrogen generators.
- At 1:20am, April 7<sup>th</sup>, the D/W pressure was 156.3 kPaabs and it has changed to 117.4 kPaabs, as of 11:00am, May 16<sup>th</sup>. The injected amount of nitrogen gas was approx. 25,800m<sup>3</sup>.

#### <Improvement of Working Environment in the Reactor Building, Unit 1>

- On May 9<sup>th</sup>, we fully opened double doors and evaluated that there was no impact on the surrounding area based on the measurement of air dose rate.
- On May 9<sup>th</sup>, we conducted investigations of the site (regarding lighting equipment, shielding equipment and radiation dose).
- On May 10<sup>th</sup>: calibration of water level gauge and investigation of the site (checking situation of pipes etc.)
- On May 11<sup>th</sup>: calibration of water level gauge and calibration of pressure gauge of containment vessel.

#### <Others>

- Since April 10<sup>th</sup>, we have been clearing outdoor rubbles by a remote control to

improve working environment.

- Since April 26<sup>th</sup>, we have continued to spray the dust inhibitor. (On May 15<sup>th</sup> sprayed about 7,000m<sup>2</sup>, on May 16<sup>th</sup>, sprayed around roads in front of the old Main Administrative Building, controlled industrial waste disposal area etc, about 10,000 m<sup>2</sup>; continued).
- May 9<sup>th</sup>, we commenced preparation work for installing support structure into the bottom of fuel spent pool of reactor building of Unit 4.
- May 10<sup>th</sup>, commenced clearing of rubble in front of carry-in gate for large stuff of reactor building of Unit 3 by using robots.
- May 11<sup>th</sup>, during the blockage work of the vertical shaft, workers confirmed that water was flowing into power cable pit of south side of Unit 3 screen.
  - 18:30 – 18:40: pouring concrete in the cable pit
  - 18:45: confirmation of that leaking has stopped.
- May 12<sup>th</sup>, a reinforcement work of power source line of Unit 3 and 4
- May 13<sup>th</sup>, a preparation work for installation of a cover for the reactor building of Unit 1.
- May 13<sup>th</sup>, implemented confirmation at 1<sup>st</sup> floor northeast area and the basement of northwest stair in reactor building of unit 1. Confirmed accumulated water at underground of northwest stair in reactor. Confirmed the plant conditions inside of Unit 1's reactor building using the remote-controlled robot.
- At around 5:20am, May 15<sup>th</sup>, "Mega Float" left from Yokohama port to Onahama port.

END