#### Plant Status of Fukushima Daiichi Nuclear Power Station

May 17<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: 2,812 mm (as of 7:00, May 17))
- From May 10<sup>th</sup>, installing a transferring line to the area of Unit 3 turbine building started. From 1:58 pm to 2:32 pm on May 17<sup>th</sup>, a leakage check was conducted.
- From May 1<sup>st</sup>, draining water of the basement of Unit 6 turbine building has been transferred to temporary tanks.
  - (May 15<sup>th</sup>, approximately 100m3, May 16<sup>th</sup> approximately 80m3, May 17<sup>th</sup> from 10am to 2:00 pm approximately 80m3 being transferred).

#### ♦ Water level at the vertical shaft of the trench and T/B (As of 7:00 am, May 17<sup>th</sup>)

	Vertical Shaft of Trench	T/B			
	(from top of grating to surface)				
Unit 1	O.P. +1,090 mm (2,910 mm)(*)	O.P. +5,050 mm			
	No change since 7:00 am, May 16 <sup>th</sup>	No change since 7:00 am, May 16 <sup>th</sup>			
Unit 2	O.P. +3,240 mm (760 mm)	O.P. +3,230 mm			
	No change since 7:00 am, May 16 <sup>th</sup>	No change since 7:00 am, May 16 <sup>th</sup>			
Unit 3	O.P. +3,350 mm (650 mm)	O.P. +3,340 mm			
	20 mm increase since 7:00 am, May 16 <sup>th</sup>	30 mm increase since 7:00 am, May 16 <sup>th</sup>			
Unit 4	_	O.P. +3,450 mm			
		No change since 7:00 am, May 16 <sup>th</sup>			

<sup>-</sup> 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-131:0.04Bq/cm3, Cs-134:0.06Bq/cm3, Cs-137: 0.09Bq/cm3

Sampling: Everyday

Compling Location (accessed)	Date	Time	Ratio to Criteria (times)		
Sampling Location (seacoast)			lodine-131	Cecium-134	Cecium-137
Approx. 30m north to Discharge Canal of	5/16	9:15/14:10	0.21/0.30	1.6/2.2	1.3/1.4
Units 5 & 6 of Fukushima Daiichi	3/10				
Approx. 330m south to Discharge Canal	5/16	8:55/13:55	0.12/0.15	0.97/0.78	0.71/0.67
of Units 1 to 4 of Fukushima Daiichi.	5/16				

Around the north Discharge Canal of Fukushima Daini (10km from Fukushima	5/16	8:30	ND	0.27	0.20
Daiichi)	0/10	0.00	110	0.21	0.20
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	5/16	7:55	ND	0.47	0.39
Approx. 3km offshore from Haramachi Ward, Minamisoma City (upper layer)	5/16	10:20	ND	ND	ND
Approx. 3km offshore from Odaka Ward, Minamisoma City(upper layer)	5/16	10:35	ND	ND	ND
Approx. 3km offshore from Iwasawa, Naraha Town(upper layer)	5/16	10:15	ND	0.18	0.12
Approx. 3km offshore from the north Iwaki	5/16	6:25/6:25	ND/ND	0.23/ND	0.17/ND
Approx. 3km offshore from the Natsui River, Iwaki City*	5/16	6:00/6:00	ND/ND	0.15/ND	0.08/ND
Approx. 3km offshore from Onahama port, Iwaki City*	5/16	6:00/6:00	ND/ND	ND/ND	ND/ND
Approx. 3km offshore from Ena, Iwaki City*	5/16	6:20/6:20	ND/ND	ND/ND	ND/ND
Approx. 3km offshore from Numanouchi, Iwaki City*	5/16	5:50/5:50	ND/ND	0.10/ND	0.08/ND
Approx. 3km offshore from Toyoma in Iwaki City*	5/16	5:35/5:35	ND/ND	0.06/ND	0.06/ND
Approx. 8km offshore from Haramachi Ward, Minamisoma City (upper layer)	5/16	11:00	ND	0.10	ND
Approx. 8km offshore from Iwasawa Seashore, Naraha Town (upper layer)	5/16	9:45	ND	ND	0.06
Approx. 15km offshore from Minamisoma City	5/16	9:40	ND	0.09	0.11
Approx 15km offshore from Ukedo River, Namie Town	5/16	9:15	ND	ND	ND
Approx. 15km offshore from Fukushima Daiichi Nuclear Power Station	5/16	8:40	ND	ND	ND
Approx. 15km offshore from Fukushima Daini Nuclear Power Station	5/16	9:15	ND	ND	ND
Approx. 15km offshore from Iwasawa seashore, Naraha Town	5/16	8:35	ND	ND	ND
Approx. 15km offshore from Hirono City	5/16	8:10	ND	ND	ND

<sup>\*</sup> Result: Left Number: Upper Layer, Right Number: Lower Layer

# <Water Injection and Spraying to Spent Fuel Pools>

♦ Result on May 16<sup>th</sup>

[Unit 3] From 3:00 pm to 6:32 pm, we sprayed fresh water and hydrazine with the concrete pumping vehicle (approx. 106 t).

♦Plan on May 17<sup>th</sup>

[Unit 4] We are planning to inject fresh water and hydrazine using the concrete pumping vehicle starting at 4:00 pm.

- ♦ 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 (10.0 m3/h\*):

Reactor pressure vessel temperature:

At 12:20pm, May 17<sup>th</sup>, <Feed-water nozzle> 88.3°C

<Bottom of reactor pressure vessel>80.2℃

At approx. 11:50 am on May 17<sup>th</sup>, we changed the rate of water injection to RPV from 10m3/h to 6m3/h

[Unit 2] Injecting fresh water (6.8 m3/h\*)

Reactor pressure vessel temperature:

At 11:00am, May 17<sup>th</sup>, <Feed-water nozzle> 113.2°C

[Unit 3] Injecting fresh water (through Fire Protection System 9.0 m3/h + Feed Water System 6.0 m3/h)

Reactor pressure vessel temperature:

At 11:50am, May 17<sup>th</sup>, <Bottom of reactor pressure vessel> 133.2°C

※ At approx. 10:11 am on May 17<sup>th</sup>, we changed the rate of water injection to RPV from 6m3/h to 9m3/h

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 119.6 kPaabs, as of 11:00am, May 17<sup>th</sup>. The injected amount of nitrogen gas was approx. 26,500m<sup>3</sup>.

# <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 16<sup>th</sup> sprayed about 6,520m2, on May 17<sup>th</sup>, sprayed around the baseball park, controlled industrial waste disposal area etc, about 7,000 m2; 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 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.
- At around 5:20am, May 15<sup>th</sup>, "Mega Float" left from Yokohama port to Onahama port.
- At around 8:00am, May 17<sup>th</sup>, "Mega Float" arrived at Onahama port.

**END**