# Plant Status of Fukushima Daiichi Nuclear Power Station

May 29<sup>th</sup>, 2011 Tokyo Electric Power Company

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

Unit	Draining water source place transferred	Status			
Unit 2	Unit 2 Vertical Shaft of Trench	Increase of water level of Process Main			
	Process Main Building of Central Radioactive	Building:			
	Waste Treatment Facility (from 10:08 am, April 19 to	3,891 mm as of 7:00am, May 29			
	4:01 pm, May 26)	(no change from 7:00, May 28)			
Unit 3	Unit 3 Turbine Building	Increase of water level of Miscellaneous Solid			
	Miscellaneous Solid Waste Volume Reduction	Waste Volume Reduction Treatment Building:			
	Treatment Building of Central Radioactive Waste	2,901 mm as of 7:00am, May 29			
	Treatment Facility (from 6:04 pm, May 17 ~ 9:10am,	(48 mm decrease from 7:00, May 28)			
	May 25)				
Unit 6	Unit 6 Turbine Building	May 28: approx. 400m <sup>3</sup>			
	temporary tanks (from May 1 on demand basis)	May 29: transfer underway from approx. 9:00			
		am (approx. 400m³)			

# Water level at the vertical shaft of the trench and T/B (As of 7:00 am, May 29)

	Vertical Shaft of Trench (from top of grating to surface)	T/B		
Unit 1	O.P. below +850 mm	O.P. +4,920 mm		
	No change from 7:00 am, May 28	No change from 7:00 am, May 28		
Unit 2	O.P. +3,458 mm (542mm)	O.P. +3,430 mm		
	34 mm increase since 7:00 am, May 28	38 mm increase since 7:00 am, May 28		
Unit 3	O.P. +3,597 mm (403 mm)	O.P. +3,598 mm		
	28 mm increase since 7:00 am, May 28	28 mm increase since 7:00 am, May 28		
Unit 4		O.P. +3,574 mm		
	-	27 mm increase since 7:00 am, May 28		

- 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: 40Bq/L, Cs-134: 60Bq/L, Cs-137: 90Bq/L, Sampling: Everyday

Compline Location (accessed)	Date	Time	Ratio to Criteria (times)		
Sampling Location (seacoast)			lodine-131	Cecium-134	Cecium-137
Approx. 30m north to Discharge Canal of Units 5 & 6 of Fukushima Daiichi	May 28	9:20/13:20	0.10/ND	1.1/0.78	0.78/0.71
Approx. 330m south to Discharge Canal	May 28				
of Units 1 to 4 of Fukushima Daiichi	IVIAY ZO	9:00/13:00	ND/ND	1.2/0.85	0.67/0.60
Around the north Discharge Canal of	May 28				
Fukushima Daini (10km from		8:30	ND	0.32	0.18
Fukushima Daiichi)					
Around Iwasawa Seashore, Naraha	May 28				
Town (approx. 16km from Fukushima		7:50	ND	0.42	0.31
Daiichi)					

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

Results on May 28

[Unit 3] From 1:28 pm - 3:08 pm, freshwater and hydrazine was injected from Spent Fuel Cooling and Filtering System (approx. 50 tons).

[Unit 1] From 16:47 – 17:00 pm, freshwater was injected from Spent Fuel Cooling and Filtering System.

[Unit 4] From 16:47 – 17:00 pm, freshwater and hydrazine was sprayed by a concrete pumping vehicle (approx. 60 tons)..

### Results on May 29

[Unit 1] From 11:00 – 15:35, freshwater was injected from Spent Fuel Cooling and Filtering System (approx. 200 tons).

#### Others

- We are conducting detailed nuclide analyses on the water collected on April 12 from the spent fuel pool of Unit 4.
- We are conducting detailed nuclide analyses on the water collected on April 16 from the skimmer surge tank of Unit 2.
- We are conducting detailed nuclide analyses on the water collected on May 8 from the spent fuel pool of Unit 3.

### <Water Injection to Reactor Pressure Vessels>

[Unit 1] Injecting fresh water (approx. 6 m³/h):

Reactor pressure vessel temperature:

At 11:00am, May 29, <Feed-water nozzle> 114.1

### <Bottom of reactor pressure vessel>98

[Unit 2] Injecting fresh water (Feed Water line: approx. 5 m³/h, Fire Extinction line approx. 7 m³/h)

Reactor pressure vessel temperature:

At 11:00am, May 29, <Feed-water nozzle> 111.5

11:33 am on May 29, injection by Feed Water line commenced.

[Unit 3] Injecting fresh water (Feed Water line approx. 13.5 m³/h, stopped injection by Fire Extinction line)

Reactor pressure vessel temperature:

At 11:00am, May 29, <Bottom of reactor pressure vessel> 123.2

- Since 4:53 pm, May 12, injection line has been changed from fire protection system to feed water system (monitoring the temperature trend).
- From 2:15 pm, May 20, we changed the amount of water injected to the reactor pressure vessel by the feed water system from 9m³/h to 12m³/h.
- From 5:39 pm, May 20, we gradually decreased the amount of water injected to the reactor pressure vessel by the fire protection system (from 5:00 am, May 21<sup>st</sup> : 6m³/h, from 11:31 am, May 23: 5m³/h, from 2:08 pm, May 23: 4m³/h, from 5:19 pm, May 23: 3m³/h)
- -May 28, Stopped freshwater injection through fire extinction line

[Unit 4] [Common spent fuel pool] No particular changes on parameters.

[Units 5/6] Reactor cold shutdown.

 21:24, May 28, found RHRS pumps being out of service.8:12, May 29, Replacement works to spare pumps started. At 12:31, start spare pumps, 12:49 cooling of reactor recommenced.

### <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.
- D/W pressure: 156.3 kPaabs (1:20am, April 7) -> 131.7 kPaabs, (11:00am, May 29) Injected amount of nitrogen gas was approx. 34,300m<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 the dust inhibitor. (On May 28, sprayed in the area of approx. 4,375m². On May 29, we are spraying the dust inhibitor around the gate).
- Since May 9, we commenced preparation work for installing support structure into the bottom of fuel spent pool of reactor building of Unit 4.
- 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 24, we are installing major equipments such as heat exchange units regarding installing cyclic cooling system for spent fuel pool at Unit 2. (Planned commencement of cooling: May 31)
- Since May 26, TEPCO employees have entered Unit2 to conduct dust sampling around double doors (inside) of reactor building.
- May 27, we started to enter the reactor building of Unit 1 in order to conduct sampling survey of accumulated

water on the underground floor, to install water level gauge, and to lay hoses.

- At around 14:10, May 29, at 20 km gate to the west of J-village, a worker of cooperating company incharge of unloading works was injured due to dropping steal stock on the right foot and transferred by amburance.

**END**