Plant Status of Fukushima Daiichi Nuclear Power Station

June 9, 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 (10:08 am, April 19 \sim	4,677 mm as of 7:00 am, June 9
	4:01 pm, May 26 and f6:39 pm, June 4 \sim 2:20 pm,	(170 mm increase from 7:00 am, June 8)
	June 8, transfer suspension due to electric pump	
	suspension. Transfer resumed 6:03 pm, June 8 \sim)	
	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	Increase of water level of Miscellaneous Solid
	-> Miscellaneous Solid Waste Volume Reduction	Waste Volume Reduction Treatment Building:
	Treatment Building of Central Radioactive Waste	2,990 mm as of 7:00am, June 9
	Treatment Facility (from 6:04 pm, May 17 \sim 9:10am,	(12 mm increase from 7:00 am, June 8)
	May 25)	
	Unit 3 condenser → Unit 3 condensate storage	
	tank (from 12:50 pm, June 2 to 9:56 pm, June 4 and	
	from 6:26pm, June 5 \sim 10:44 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 \sim 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 9)

	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 8	No change from 7:00 am, June 8		
Unit 2	O.P. +3,787 mm (213mm)	O.P. +3,753 mm		
	3 mm decrease since 7:00 am, June 8	1 mm decrease since 7:00 am, June 8		
Unit 3	O.P. +3,779 mm (221 mm)	O.P. +3,752 mm		
	15 mm decrease since 7:00 am, June 8	16 mm decrease since 7:00 am, June 8		
Unit 4	_	O.P. +3,759mm		
	_	14 mm decrease since 7:00 am, June 8		

- Blockage work at the vertical shaft of trench and pit of Unit 2, 3 underway. (work was completed on June 2. Blockage work at the pit 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		T '	Ratio to Criteria (times)		
		Time	lodine-131	Cecium-134	Cecium-137
Approx. 30m north to Discharge Canal of Units 5 & 6 of Fukushima Daiichi		9:05/13:55	ND/ND	0.40/ND	0.37/ND
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi		8:50/13:40	ND/ND	0.33/0.48	0.28/0.38
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)		8:30	ND	0.10	0.06
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	6/8	8:00	ND	ND	ND
Approx. 15km offshore of Ukddogawa, Namie town ^{**}	6/8	9:40/9:40	ND/ND	ND/ND	ND/ND
Approx. 15km offshore of Fukushima Daiichi site**	6/8	9:05/9:05	ND/ND	ND/0.08	ND/ND
Approx. 15km offshore of Fukushima Daini site [™]	6/8	8:30/8:30	ND/ND	ND/ND	ND/ND
Approx 15km offshore of Iwasawa Seashore, Naraha Town**	6/8	7:50/7:50	ND/ND	ND/0.08	ND/ND
Approx. 15km offshore of Minami Soma City [™]	6/8	10:00/10:00	ND/ND	ND/ND	ND/ND
Approx. 15km offshore of Hirono City**	6/8	7:15/7:15	ND/ND	0.13/0.07	ND/ND

^{💥 1} Analyses Results Left numeric: Upper Layer, Right numeric: Lower Layer

<Water Injection and Spraying to Spent Fuel Pools>

♦ Results on June 8

[Unit 4]From 4:12 pm to 7:41 pm, sprayed freshwater and hydrazine by a concrete pumping vehicle (approx. 120t).

♦ Plans on June 9

[Unit 3] From 1:42 pm to 3:31 pm, sprayed freshwater and hydrazine from FPC line (approx. 55t).

♦ 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 9)32°C
- From 9:00 am on June 8, in order to install an additional temporary residual heat removal seawater pump (total: 2), we stopped that pump.

From 12:35 pm, we restarted that temporary residual heat removal system.

^{💥 2} Analyses Results Left numeric: Upper Layer, Middle numeric: Middle Layer, Right numeric: Lower Layer

<Water Injection to Reactor Pressure Vessels>

[Unit 1] Injecting freshwater (reactor feed water system: 5.1 m³/h):

At 11:00am, June 9, <Feed-water nozzle> 115.6°C

<Bottom of reactor pressure vessel>99.1℃

[Unit 2] Injecting freshwater (reactor feed water system:5.0m³/h)

At 11:00am, June 9, <Feed-water nozzle> 108.4℃

[Unit 3] Injecting freshwater (reactor feed water system: 11.2 m³/h)

At 11:00am, June 9, <Bottom of reactor pressure vessel> 186.0°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) → 131.9kPaabs, (11:00am, June 9) approx.
 41,600m³. **June 8, due to power shutdown, 2:57 pm, N2 injection machine is on standby. 5:54 pm. Injection resumed.

<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 7, approx. 8,750m². On June 8, spraying around the observing point, etc.).
- 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 woks of port related facilities
- Since June 4, large tank for storing contaminated water and treated water are transferring in series.
- Since June 4, setting work for water treatment facility, pipe arrangement / electric work and flow examination are being conducted.
- On June 8 2:20 pm, we confirmed turning off of lights in the Main Control Room for Units 1 and 2.
 - 2:35 pm, we confirmed part of power boards in the power station are off.
 - 2:49 pm, we confirmed cessation of transmission from monitoring posts 7 and 8.
 - 2:57 pm, as we observed increase of pressure at the nitrogen gas supplying facility for Unit 1, we put the facility in stand-by. We are checking the cause.
 - 5:27 pm, we confirmed the lights in the Main Control Room at Units 1, 2 turn on.
 - 5:50 pm. we confirmed resume of transmission from monitoring posts 7 and 8.
 - 5:54 pm, Operation resumption at nitrogen gas supplying facility for Unit 1.
 - 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 $\boldsymbol{\gamma}$ camera, etc, within the reactor building)

END