### Plant Status of Fukushima Daiichi Nuclear Power Station

January 23, 2012 Tokyo Electric Power Company

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

Status of highly concentrated accumulated radioactive water treatment facility and storage tank facility [Treatment Facility]

- ·At 12:12 on January 16, 2012: we started the second cesium absorption apparatus. At 12:17, the flow rate reached steady state.
- At 18:42 on January 17, 2012: We actuated Cesium adsorption apparatus. At 18:45, the flow rate reached steady state. [Storage Facility]
- · June 8, 2011 ~: Large tanks to store and keep treated or contaminated water have been transferred and installed sequentially.

# Accumulated water in vertical shafts of trenches and at basement level of building

Unit	Draining water source Place transferred	Status	
	· Unit 2T/B Central Radioactive Waste Treatment Facility		
Unit 2	[Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	·14:33 on January 22 – Transferring	
Unit 3	<ul> <li>Unit 3T/B Central Radioactive Waste Treatment Facility</li> <li>[Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]</li> </ul>	·Transferred from 14:30 on January 22 to 15:45 on January 23	
Unit 6	·Unit 6T/B Temporary tanks	·No plan to transfer on Jan 22	

Unit 3: From 9:01 to 16:10 on January 23, condensate storage tank was flooded.

Place transferred	Status of Water Level (As of January 23 at 7:00)		
Process Main Building	Water level: O.P.+ 3,827 mm(Accumulated total increase:5,044 mm), decrease 138mm from 7:00 am on January 22		
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,470 mm(Accumulated total increase:3,196 mm), increase 479mm from 7:00 am on January 22		

From 10:36 to 15:51 on January 23, in Central Radioactive Waste Treatment Facility, accumulated water was transferred from On-site Bunker Building to Process Main Building.

# Water level of the vertical shaft of the trench, T/B and R/B (As of January 23 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on January 22)	O.P.+ 2,635 mm (27 mm decrease since 7:00 on January 22)	O.P.+ 4,348 mm (107 mm increase since 7:00 on January 22)
Unit 2	O.P.+ 3,167 mm (31 mm decrease since 7:00 on January 22)	O.P.+ 3,134 mm (26 mm decrease since 7:00 on January 22)	O.P.+ 3,302 mm (6 mm decrease since 7:00 on January 22)
Unit 3	O.P.+ 3,081 mm (6 mm decrease since 7:00 on January 22)	O.P.+ 2,994 mm (45 mm decrease since 7:00 on January 22)	O.P.+ 3,285 mm (34 mm decrease since 7:00 on January 22)
Unit 4	-	O.P.+ 3,022 mm (2 mm increase since 7:00 on January 22)	O.P.+ 3,043 mm (2 mm increase since 7:00 on January 22)

## <Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Place of sampling	Date of	Time of	Ratio of density limit (times)		
	sampling	sampling	I-131	Cs-134	Cs-137

Around 30 m north from discharge channel of 5-6U, 1F	1/22	8:40	ND	0.07	0.06
Around 330 m south from discharge channel of 1-4U, 1F	1/22	8:15	ND	0.02	0.03

Others: Samples from 1 point along the shore of Fukushima (sampled on January 22) and 6 points at offshore of Miyagi (sampled on January 22) showed ND for all three major nuclides (lodine-131, Cs-134, 137).

# < Cooling of Spent Fuel Pools > (As of January 23 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	18.5
Unit 2	Circulating Cooling System	Under operation	14.5
Unit 3	Circulating Cooling System	Under operation	14.1
Unit 4	Circulating Cooling System	Under operation	23

- [Unit 2] · A desalination equipment has been activated in order to reduce density of salt from the spent fuel pool since 11:50 am on Jan 19, 2012.
- [Unit 3] · A radioactive material removal equipment has been activated in order to remove radioactive materials from the spent fuel pool since 3:18 pm on Jan 14, 2012.

# < Water Injection to Pressure Containment Vessels> (As of January 23 at 11:00)

Unit	Status of water injection	Feed-water nozzle Temp.	Reactor pressure vessel Bottom temp.	Pressure of primary containment vessel
Unit 1	Injecting freshwater (Feed Water System: Approx.4.4 m³/h, Core Spray System: Approx.2.0 m³/h)	26.5	26.8	105.6 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.7.0 m³/h, Core Spray System: Approx.2.0 m³/h)	47.6	49.3	111 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.6.0 m³/h, Core Spray System: Approx.3.0 m³/h)	45.5	53.6	101.6 kPaabs

- [Unit 1] At 10:22 am on January 23: As the decrease of the water injection amount was observed, we adjusted the amount of water injection from the core spray system from approx. 1.8 m³/h to approx. 2.0 m³/h. Injected amount from the reactor feed water system is still approx. 4.6 m³/h.
- [Unit 2] At 10:16 am on January 23: As the pump for Reactor water injection was switched to the reactor injection pump on the hill, we adjusted the amount of water injection from the core spray system from approx. 6.0 m³/h to approx. 7.0 m³/h and the Injected amount from the reactor feed water system from approx. 3.0 m³/h to approx. 2.0 m³/h.
- [Unit 3] At 10:13 am on January 23: As the pump for Reactor water injection was switched to the reactor injection pump on the hill, we adjusted the amount of water injection from the core spray system from approx. 5.0 m³/h to approx. 6.0 m³/h and the Injected amount from the reactor feed water system from approx. 3.9 m³/h to approx. 3.0 m³/h.

[Unit 4] [Unit 5] [Unit 6] · No major change

#### <Others>

- October 7, 2011 ~: Continuously implementing water spray using water after purifying accumulated water of Unit 5 and Unit 6 to prevent spontaneous fire of trimmed trees and diffusion of dust.
- January 11, 2012 ~: As finding accumulated water including radioactive materials (December 18, 2011) at the trench between Process Main Building of Central Radioactive Waste Treatment Facility and Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building), we started inspection of the other trenches in the site. \*Please refer to the other reference materials for the result of daily inspection.