Plant Status of Fukushima Daiichi Nuclear Power Station

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January 24 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.
- At 8:35 on January 24, 2012: we suspended the second cesium absorption apparatus due to reverse cleaning of the filters because the amount of disposal water of the second cesium absorption apparatus decreased gradually. After that, we restarted the apparatus at 14:55 on the same day. At 15:03 on the same day, the flow rate reached steady state. * From now, we will conduct scheduled cleaning of filters.

[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 2	 Unit 2T/B Central Radioactive Waste Treatment Facility [Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)] 	Transferred from 14:33 on January 22 to 10:02 on January 24 15:36 on January 24 – Transferring			
Unit 3	 Unit 3T/B Central Radioactive Waste Treatment Facility [Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)] 	·15:24 on January 24 – Transferring			
Unit 6	·Unit 6T/B Temporary tanks	Transferred from 10:00 to 16:00 on January 24			

Place transferred	Status of Water Level (As of January 24 at 7:00)		
Process Main Building	Water level: O.P.+ 3,772 mm(Accumulated total increase:4,989 mm), decrease 55mm		
9	from 7:00 am on January 23		
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,995 mm(Accumulated total increase:3,721 mm), increase 525mm from 7:00 am on January 23		

Water level of the vertical shaft of the trench, T/B and R/B (As of January 24 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on January 23)	O.P.+ 2,652 mm (17 mm increase since 7:00 on January 23)	O.P.+ 4,339 mm (9 mm decrease since 7:00 on January 23)
Unit 2	O.P.+ 3,093 mm (74 mm decrease since 7:00 on January 23)	O.P.+ 3,068 mm (66 mm decrease since 7:00 on January 23)	O.P.+ 3,226 mm (76 mm decrease since 7:00 on January 23)
Unit 3	O.P.+ 3,073 mm (8 mm decrease since 7:00 on January 23)	O.P.+ 3,020 mm (26 mm increase since 7:00 on January 23)	O.P.+ 3,299 mm (14 mm increase since 7:00 on January 23)
Unit 4	-	O.P.+ 3,008 mm (14 mm increase since 7:00 on January 23)	O.P.+ 3,027 mm (16 mm decrease since 7:00 on January 23)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Place of compling	Date of	Time of	Ratio of density limit (times)		
Place of sampling	sampling	sampling	I-131	Cs-134	Cs-137
Around 30 m north from discharge channel of 5-6U, 1F	1/23	8:55	ND	0.06	0.05
Around 7km south from discharge channel of 1-4U, 2F	1/23	8:10	ND	0.02	0.02

Others: Samples from 1 point along the shore of Fukushima (sampled on January 23) and 5 points at offshore of Ibaragi (sampled on January 17,18) showed ND for all three major nuclides (lodine-131, Cs-134, 137).

< Cooling of Spent Fuel Pools > (As of January 24 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	20.0
Unit 2	Circulating Cooling System	Under operation	14.2
Unit 3	Circulating Cooling System	Under operation	13.8
Unit 4	Circulating Cooling System	Under operation	24

- [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.

<u><Water Injection to Pressure Containment Vessels></u> (As of January 24 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.4.3 m³/h, Core Spray System: Approx.2.0 m³/h)	26.5	26.8	106.1 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.8.0 m³/h, Core Spray System: Approx.1.0 m³/h)	48.3	49.9	111 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.7.0 m³/h, Core Spray System: Approx.2.0 m³/h)	45.1	53.9	101.6 kPaabs

- [Unit 2] At 10:42 am on January 24: 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. 7.0 m³/h to approx. 8.0 m³/h and the Injected amount from the reactor feed water system from approx. 1.9 m³/h to approx. 1.0 m³/h.
- [Unit 3] At 10:38 am on January 24: 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. 2.9 m³/h to approx. 2.0 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.
- Around 12:00 on January 24: The cooperative company's worker who are working for cleaning the truck hit his full face mask to the rear gate of the truck cargo and the filter of his mask came off temporally. Considering to the possibility

of the internal dose, we conducted the measurement by the whole body counter. As a result, we found no problems for the internal dose (below the lever to be recorded to the radiation recording book) and have evaluated no internal exposure. We found no contamination inside of the full face mask, surface of his face and his nasal cavity.

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