Plant Status of Fukushima Daiichi Nuclear Power Station

January 20, 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]

・12:12 on January 16, 2012: we started the second cesium absorption apparatus. At 12:17 the flow rate reached steady state.

・18:42 on January 17, 2012: We actuated Cesium adsorption apparatus. At 15:30 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 1	・Unit 1 T/B→ Unit 2 T/B	・Transferring from 15:37 on Jan. 20
Unit 2	・Unit 2 T/B → Central Radioactive Waste Treatment Facility [Process Main Building] Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	・Transferring from 15:23 on Jan. 20
Unit 3	・Unit 3 T/B → Central Radioactive Waste Treatment Facility [Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	・Transferring from 15:17 on Jan 20.
Unit 6	・Unit 6 T/B→Temporary tanks	・Transferred from 10:00 to 16:00 on Jan 20

Transferring destination	Water level at transferring destination (as of 7:00 am on January 20)
Process Main Building	O.P.+4,272 mm (cumulative elevation of water level:5,489 mm), decrease 164mm from 7:00 am on January 19
Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)	O.P.+1,997 mm (cumulative elevation of water level:2,723 mm), decrease 275mm from 7:00 am on January 19

◇Water level of the vertical shaft of the trench, T/B and R/B(As of January 20 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on January 19)	O.P.+ 3,272 mm (12 mm increase since 7:00 on January 19)	O.P.+ 4,190 mm (16 mm inrease since 7:00 on January 19)
Unit 2	O.P.+ 3,070 mm (73 mm increase since 7:00 on January 19)	O.P.+ 3,049 mm (66 mm increase since 7:00 on January 19)	O.P.+ 3,199mm (68 mm increase since 7:00 on January 19)
Unit 3	O.P.+ 3,103 mm (18 mm increase since 7:00 on January 19)	O.P.+ 3,061 mm (21 mm increase since 7:00 on January 19)	O.P.+ 3,340 mm (24 mm increase since 7:00 on January 19)
Unit 4	—	O.P.+ 3,036 mm (19 mm increase since 7:00 on January 19)	O.P.+ 3,058 mm (19 mm increase since 7:00 on January 19)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Place of sampling	Date of sampling	Time of sampling	Ratio of density limit (times)		
			I-131	Cs-134	Cs-137
Around 30 m north from discharge channel of 5-6U, 1F	January 19	8:45	ND	0.06	0.05
Around 330 m south from discharge channel of 1-4U, 1F	January 19	8:25	ND	0.03	0.02
Around discharge channel of 3-4U, 2F	January 19	8:20	ND	ND	0.02
Around 7 km south from discharge channel of 1-2U, 2F	January 19	7:55	ND	ND	0.01

・Others: The major 3 nuclides (I-131, Cs-134, Cs-137) at 5 points off the shore of Fukushima (sampled on January 18) and the major 6 nuclides (I-131, Cs-134, Cs-137, Mn-54, Co-60, Ce-144) at 2 points off the shore of Fukushima (sampled on January 10) all showed ND.

* As we lower the detection limits, we measured again the samples at the upper layer of 15 km off the shore of F1 and 15 km off the shore of F2 on Jan 1.

<Cooling of Spent Fuel Pools > (As of January 20 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	15.5 ℃
Unit 2	Circulating Cooling System	Under operation	13.9 ℃
Unit 3	Circulating Cooling System	Under operation	13.6 ℃
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 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 15:18 on Jan 14, 2012.

< Water Injection to Pressure Containment Vessels > (As of January 20 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.4.5 m^3/h, Core Spray System: Approx.1.9 m^3/h)	26.7℃	27.0℃	107.2 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.5.0 m^3/h, Core Spray System: Approx.5.0 m^3/h)	47.7℃	50.2℃	109 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.5.0 m^3/h, Core Spray System: Approx.4.0 m^3/h)	45.3℃	53.5℃	101.6 kPaabs

【Unit 2】 11:15 on January 20: As the pump for Reactor water injection was switched to the reactor injection pump on the hill, we adjusted water injection from the reactor feed water system from approx 4.2 m^3/h to 5.0 m^3/h, and water injection from the core spray system from approx. 6.0 m^3/h to 5.0 m^3/h.

【Unit 3】 10:50 on January 20: As the pump for Reactor water injection was switched to the reactor injection pump on the hill, we adjusted water injection from the reactor feed water system from approx 4.0 m^3/h to 5.0 m^3/h, and water injection from the core spray system from approx. 5.0 m^3/h to 4.0 m^3/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.

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