Plant Status of Fukushima Daiichi Nuclear Power Station

December 28, 2011
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]

·10:37 on December 27: We started 2nd cesium adsorption facility. At 10:43 am, we reached the regular flow rate.

[Storage Facility]

·6/8 ~ 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)] 	· 15:22 on December 28 - 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)]	· 15:32 on December 28 - Transferring
Unit 6	·Unit 6T/B Temporary tanks	·12/28 No plan of transfer

Place transferred	Status of Water Level (As of December 28 at 7:00)			
Process Main Building	Water level: O.P.+ 2,228 mm(Accumulated total increase:3,445 mm) 75mr			
1 rocess Main Building	increase since 7:00 on December 27			
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,200 mm(Accumulated total increase:3,926 mm) 718mm decrease since 7:00 on December 27			

(Other transfer) · 10:14-15:18 on December 27, We transferred from side banker building to process main building in Centralized Radiation Waste Treatment Facility.

Water level of the vertical shaft of the trench, T/B and R/B(As of December 28 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm	O.P.+ 2,836 mm	O.P.+ 4,243 mm
	(No change since 7:00 on	(22mm increase since 7:00 on	(1mm decrease since 7:00 on
	December 27)	December 27)	December 27)
Unit 2	O.P.+ 3,236 mm	O.P.+ 3,209 mm	O.P.+ 3,331 mm
	(52mm increase since 7:00 on	(48mm increase since 7:00 on	(40mm increase since 7:00 on
	December 27)	December 27)	December 27)
Unit 3	O.P.+ 3,188 mm	O.P.+ 3,158 mm	O.P.+ 3,411 mm
	(19mm increase since 7:00 on	(22mm increase since 7:00 on	(24mm increase since 7:00 on
	December 27)	December 27)	December 27)

Unit 4	-	O.P.+ 3,126 mm (2mm increase since 7:00 on	O.P.+ 3,148 mm (14mm increase since 7:00 on
		December 27)	December 27)

<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
Approx. 30m North of Discharge Channel of 5,6U, 1F	12/27	8:35	ND	0.05	0.04
Approx. 330m South of Discharge Channel of 1-4U, 1F	12/27	8:10	ND	0.03	0.02

Others: samples from 2 locations at the coast of Fukushima Daiichi Nuclear Power Plant (sampled on December 27), from 4 locations at offshore of Fukushima Prefecture (sampled on December 26 showed ND for all three major nuclides (lodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools >(As of December 28 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	11.0
Unit 2	Circulating Cooling System	Under operation	14.0
Unit 3	Circulating Cooling System	Under operation	12.4
Unit 4	Circulating Cooling System	Under operation	20

[[]Unit 4] ·11/29 ~ We started operation of the ion exchange equipment to remove salt from spent fuel pool. ·13:28-15:07 on December 28, injected hydrazine to spent fuel pool (Approx.2 m³).

< Water Injection to Pressure Containment Vessels > (As of December 28 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)	27.3	27.8	106.8 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.1.8 m³/h, Core Spray System: Approx.7.0 m³/h)	54.7	58.1	108 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.3.0 m³/h, Core Spray System: Approx.5.9 m³/h)	49.1	58.4	101.6 kPaabs

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

<Others>

- ·10/7 ~ 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.
- •9:00-10:00 on December 28 We checked the instruments of one point in the Primary containment vessel, Unit 1 that indicated increase of measured atmospheric temperature from December 22 and confirmed soundness. The measured atmospheric temperatures at other points in the Primary containment vessel do not indicate increase.

As of December 22: Approx.38

19:00-11:00 on December 27: in order to monitor the status to that of before December 22, we adjusted the nitrogen gas injection volume to the Primary containment vessel from approx.8 m³/h to approx.18 m³/h and the gas extraction volume from the Primary containment

vessel gas control system from approx.23m³/h to approx.30 m³/h.

 $^{\cdot}$ 12/28 We conducted gas sampling of the Primary containment vessel gas control system, Unit 2. The analysis indicated that Xenon 135 at the entrance of the system was below ND (1.1 × 10⁻¹ Bq/cm³), below the recriticality judgment threshold of 1Bq/cc.

End