Plant Status of Fukushima Daiichi Nuclear Power Station

February 11, 2012
Tokyo Electric Power Company

<Treatment of Accumulated 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 18:42 on January 17, 2012: Cesium adsorption apparatus started. At 18:45, the flow rate reached steady state.
- At 11:12 on February 2, 2012: Second Cesium adsorption apparatus started. At 11:15 it reached its regular flow rate.

[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 [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	・ 2/10 14:43～ transferring

Place transferred	Status of Water Level (As of 7:00 am on February 11)
Process Main Building	Water level: O.P.+ 2,717 mm (Accumulated total increase:3,934 mm), decreased by 27mm since 7:00 am on February 10
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,961mm (Accumulated total increase:3,687 mm), increased by 96mm since 7:00 am on February 10

◇Water level of the vertical shaft of the trench, T/B and R/B(As of 7:00 am on February 11)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on February 10)	O.P.+ 2,948 mm (16mm increase since 7:00 on February 10)	O.P.+ 4,311 mm (11mm decrease since 7:00 on February 10)
Unit 2	O.P.+ 3,117 mm (17mm decrease since 7:00 on February 10)	O.P.+ 3,081 mm (16mm decrease since 7:00 on February 10)	O.P.+ 3,272 mm (6mm decrease since 7:00 on February 10)
Unit 3	O.P.+ 3,091 mm (19mm increase since 7:00 on February 10)	O.P.+ 3,020 mm (20mm increase since 7:00 on February 10)	O.P.+ 3,330 mm (22mm increase since 7:00 on February 10)
Unit 4	—	O.P.+ 2,996 mm (18mm increase since 7:00 on February 10)	O.P.+ 3,019 mm (19mm increase since 7:00 on February 10)

<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
Approx. 30m north of Discharge Channel of 1F 5,6 u	2/10	8:20	ND	0.06	0.06
Approx. 330m south of Discharge Channel of 1F 1-4 u	2/10	8:35	ND	0.03	0.02
Discharge Channel of 2F 3,4 u	2/10	8:20	ND	ND	0.01

・All 3 major nuclides (I-131, Cs-134 and Cs-137) at 1 coast point (sampled on 2/10) and 4 offshore points (sampled on 2/9) of Fukushima Prefecture were ND.

<Cooling of Spent Fuel Pools >(As of 11:00 am on February 11)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation*1	23.5 ℃
Unit 2	Circulating Cooling System	Under operation	12.6 ℃
Unit 3	Circulating Cooling System	Under operation	25.9 ℃
Unit 4	Circulating Cooling System	Under operation	24 ℃

*1: Air fin cooler of Secondary System out of service

【Unit 2】

- A desalination equipment has been activated in order to reduce density of salt from the spent fuel pool since 11:50 on January 19.

【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 January 14.

<Water Injection to Pressure Containment Vessels > (As of 11:00 am on February 11)

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. 4.5m^3/h, Core Spray System: Approx.1.9 m^3/h)	23.8 ℃	24.4 ℃	106.7 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.6.7 m^3/h, Core Spray System: Approx.6.7m^3/h)	36.9 ℃	70.0 ℃	111 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.2.9 m^3/h, Core Spray System: Approx.6.0 m^3/h)	40.4 ℃	49.1 ℃	101.6 kPaabs

【Unit 2】

- From February 2, water injection to Unit 2 reactor was increased and the temperature tendency was monitored as the tendency of temperature rise at the bottom of PCV was observed, but the temperature have been high value (around 70.0℃). As a result of the sampling for the Gas Control System of the Unit 2 on February 6 to make sure there is no re-criticality state, we confirmed that the concentration of Xe-135 was below the detectible limit at the system's inlet, meaning that it falls below the re-criticality criteria of 1 Bq/cm^3. In order not to raise the possibility of re-criticality state due to the high density of water in the reactor by injecting cold water rapidly, we injected boric acid into the reactor from 0:19 am to 3:20 am on February 7, in advance of increasing water injection amount, as a safety countermeasures against the re-criticality, and changed the amount of the core spray system injection water from 3.7m^3/h to 6.7m^3/h at 4:24 am (the amount of the feed water system injection is 6.8m^3/h). Currently, the temperature is approx. 70℃ (2/11 11:00) and we continuously monitor the tendency.

- 6:20 pm on February 10, as decrease of water injection rate into reactor of Unit 2 was observed, adjustment was made from approx.6.3m^3/h to approx. 6.8m^3/h for feed water system and from approx. 6.6m^3/h to approx. 6.7m^3/h for core spraying system.

【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.

END