Plant Status of Fukushima Daiichi Nuclear Power Station

February 1, 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 18:42 on January 17, 2012: We actuated Cesium adsorption apparatus. At 18:45, the flow rate reached steady state.

・At 12:06 on January 29, we restarted the second Cesium adsorption apparatus (Sarry). At 12:18 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)］	・16:05 on January 30 - transferring
Unit 3	・Unit 3T/B→Central Radioactive Waste Treatment Facility［Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)］	・16:12 on January 30 - transferring
Unit 6	・Unit 6T/B→Temporary tanks	・Transferred from 10:00 to 16:00 on February 1

Place transferred	Status of Water Level (As of 7:00 am on February 1)
Process Main Building	Water level: O.P.+ 4,040 mm(Accumulated total increase:5,257 mm), decreased 93mm since 7:00 am on January 31
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,664mm(Accumulated total increase:3,390 mm), increased 270mm since 7:00 am on January 31

◇Water level of the vertical shaft of the trench, T/B and R/B(As of 7:00 am on February 1)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on January 31)	O.P.+ 2,786 mm (15mm increase since 7:00 on January 31)	O.P.+ 4,248 mm (22mm increase since 7:00 on January 31)
Unit 2	O.P.+ 3,056 mm (7mm decrease since 7:00 on January 31)	O.P.+ 3,030 mm (6mm decrease since 7:00 on January 31)	O.P.+ 3,194 mm (11mm decrease since 7:00 on January 31)
Unit 3	O.P.+ 3,018 mm	O.P.+ 2,941 mm	O.P.+ 3,233 mm

	(9mm decrease since 7:00 on January 31)	(14mm decrease since 7:00 on January 31)	(11mm decrease since 7:00 on January 31)
Unit 4	—	O.P.+ 2,941 mm (18mm decrease since 7:00 on January 31)	O.P.+ 2,972 mm (9mm decrease since 7:00 on January 31)

<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 30m the north of the discharge canal of 5-6 Units, 1F	1/31	8:45	ND	0.03	0.03
Around 330m the north of the discharge canal of 1-4 Units, 1F	1/31	8:25	ND	0.04	0.04
Around 7km south of the discharge channel of 1-2Units, 2F	1/31	8:05	ND	ND	0.01

・At other 4 points (sampled on January 30) offshore Fukushima Prefecture and 5 points (sampled on January 25-27) offshore Ibaragi Prefecture, all the major 3 nuclides (I-131, Cs-134 and Cs-137) were ND. Sampling at 1 coast point in Fukushima Prefecture was not conducted due to the bad weather.

<Cooling of Spent Fuel Pools >(As of 11:00 am on February 1)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation*1	14.5 ℃
Unit 2	Circulating Cooling System	Under operation	12.5 ℃
Unit 3	Circulating Cooling System	Under operation*2	19.0 ℃
Unit 4	Circulating Cooling System	Under operation	30 ℃

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

*2: Cooling tower of Secondary System out of operation

【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 1)

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.2.0 m^3/h)	24.2 ℃	24.7 ℃	105.3 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.5.0 m^3/h,Core Spray System: Approx.4.0 m^3/h)	45.6 ℃	51.3 ℃	111 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.5.0 m^3/h,Core Spra System: Approx.4.0 m^3/h)	42.1 ℃	51.8 ℃	101.6 kPaabs

【Unit 1】・At 23:15 on January 31, we adjusted the water injection volume from the feed water system from approx. 5.8 m^3/h to approx. 4.5 m^3/h, that from the reactor core spray system from approx. 0.9 m^3/h to approx. 2.0 m^3/h*.

【Unit 2】 ・At 11:50 on February 1, we adjusted the water injection volume from the feed water system from approx. 5.0

m^3/h to approx. 4.0 m^3/h, that from the reactor core spray system from approx. 4.0 m^3/h to approx. 5.0 m^3/h*.

【Unit 3】・At 11:50 on February 1, we adjusted the water injection volume from the feed water system from approx. 5.0 m^3/h to approx. 4.0 m^3/h, that from the reactor core spray system from approx. 4.0 m^3/h to approx. 5.0 m^3/h*.

* As the replacing work of the water injection line of the reactor water injection pump on the hill into the polyethylene pipe was finished, the water injection amount has been gradually adjusted.

【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.
- Approx. 22:30 January 31, 2012: The water leak from the indicator test line in the rack for instruments of the jet pump on the 1st floor of Unit 4 Reactor Building was confirmed.
- 22:43 The water leakage was stopped by closing the main valve leading to the instrument rack. Debris were scattered around on the floor, and volume of leaked water confirmed was approx. 6 L. No run-off to the outside of the reactor building. After sampling and measuring the radiation concentration of the water in the test line, we estimated that the water leaked from the reactor well.
- February 1 2012: Water leakage newly found after the last release of this material till 15:00 on February 1.
  - ・Casing of the water injection pump (electrically driven pump for Unit 2) at the side of the pure water tank (found approx. at 4:00 pm on January 31), Filtrate water*: approx. 10 L
    *Filtrate water: water taken from the dam
  - ・Indicator (flow rate transmitter) test line in the instrument rack (for the instrument rack of the jet pump) at the southwest corner on the first floor of Unit 4 Reactor Building (found approx. at 10:30 pm on January 31), Water from the reactor well: approx. 6 L

End