Plant Status of Fukushima Daiichi Nuclear Power Station

February 3, 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 11:12 on February 2, 2012, we restarted the second Cesium adsorption apparatus (Sarry). 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)]	・Transferred from 16:05 on January 30 to 10:20 on February 3 ・16:07 on February 3 - transferring
Unit 3	・Unit 3T/B→Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	・Transferred from 16:12 on January 30 to 10:12 on February 3
Unit 6	・Unit 6T/B→Temporary tanks	・Transferred from 10:00 to 16:00 on February 3

Place transferred	Status of Water Level (As of 7:00 am on February 3)
Process Main Building	Water level: O.P.+ 3,682 mm(Accumulated total increase:4,899 mm), decreased 178mm since 7:00 am on February 2
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,415mm(Accumulated total increase:4,141 mm), increased 391mm since 7:00 am on February 2

◇Water level of the vertical shaft of the trench, T/B and R/B(As of 7:00 am on February 3)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on February 2)	O.P.+ 2,818 mm (16mm increase since 7:00 on February 2)	O.P.+ 4,268 mm (3mm decrease since 7:00 on February 2)
Unit 2	O.P.+ 3,044 mm (10mm decrease since 7:00 on February 2)	O.P.+ 3,019 mm (9mm decrease since 7:00 on February 2)	O.P.+ 3,187 mm (9mm decrease since 7:00 on February 2)
Unit 3	O.P.+ 2,996 mm (15mm decrease since 7:00 on February 2)	O.P.+ 2,909 mm (12mm decrease since 7:00 on February 2)	O.P.+ 3,210 mm (9mm decrease since 7:00 on February 2)

Unit 4	—	O.P.+ 2,920 mm (17mm decrease since 7:00 on February 2)	O.P.+ 2,951 mm (6mm decrease since 7:00 on February 2)

<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 3,4 u Discharge Channel of 2F	2/2	8:20	ND	0.03	0.02
Approx. 7km South of 1,2 u Discharge Channel	2/2	8:00	ND	0.02	ND

・At other 7 points (sampled on February 1) offshore Fukushima Prefecture, all the major 3 nuclides (I-131, Cs-134 and Cs-137) were ND. Sampling at 2 coast point in Fukushima Prefecture was cancelled due to bad weather.

<Cooling of Spent Fuel Pools >(As of 11:00 am on February 3

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation*1	17.0 ℃
Unit 2	Circulating Cooling System	Under operation	12.5 ℃
Unit 3	Circulating Cooling System	Under operation*2	22.9 ℃
Unit 4	Circulating Cooling System	Under operation	27 ℃

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

*2: Cooling tower 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.

・From 13:24 to 15:07 on February 3, hydrazine [corrosion inhibitor] was injected to spent fuel pool.(approx. 2m^3)

<Water Injection to Pressure Containment Vessels > (As of 11:00 am on February 3)

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. 4.7m^3/h,Core Spray System: Approx.2.0 m^3/h)	24.0 ℃	24.6 ℃	106.3 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.2.9 m^3/h,Core Spray System: Approx.5.7 m^3/h)	46.3 ℃	58.0 ℃	110 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.3.0 m^3/h,Core Spray System: Approx.5.4 m^3/h)	41.7 ℃	51.0 ℃	101.6 kPaabs

【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.

・ From 9:30 to 13:45 on February 3, 2012, we conducted dust sampling at the opening section for equipment hatch and the

upper parts of Unit 3 reactor building.

- At 12:30 pm on February 3, one of TEPCO's employees and a worker of cooperating companies found ooze at the tank joint of concentration tank of Water Desalinations (reverse osmosis membrane). There was ooze on the surface of concrete foundation on which the tank was set, but it was not in shape of puddle and there has been no leakage to the oceans.
  We retightened the joint bolt afterwards and confirmed at 2:44 pm on the same day that the ooze from the joint had been stopped.
  The results of having measured the radiation dose of tank joint with ooze were 0.9mSv/h of γ-ray and 50mSv/h of β-ray (Those of airborne radiation dose are 0.2mSv/h of γ-ray and 7mSv/h of β-ray).
  As for the leakage, it is so little that it is invisible, but high radiation dose (22mSv/h of γ-ray and 2000mSv/h of β-ray) was confirmed at the gap between the concrete foundation which is just below the joint with ooze and the tank flange. Thus, there must have been drops. The oozed water from the joint is estimated to be concentrated water (saline water) after being treated with Water Desalinations (reverse osmosis membrane). (The radioactivity density of water at the inlet of evaporative concentration facility sampled on December 20, 2011 were 1.2×10^{1}Bq/cm^{3} of cesium134, 1.7×10^{1}Bq/cm^{3} of cesium137, and 2.7×10^{5} Bq/cm^{3} of all-β.)
  After covering the concrete surface with ooze using acrylic boards and stage planks, the radiation dose became 1.0mSv/h of γ-ray and 15mSv/h of β-ray.
- On February 3, 2012, Newly found water leakage after the latest report (at 4:00 pm on February 2) are as follows:
  at header flange of purified water transfer line (line which transfer from purified water tank to common pool) (it was found at around 11:25 am on February 3)
  (filtrated water*: about a pencil lead)
  *filtrated water: (water taken from dam)