

Plant Status of Fukushima Daiichi Nuclear Power Station

February 4, 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)]	·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	·No transferring plan on February 4.

Place transferred	Status of Water Level (As of 7:00 am on February 4)
Process Main Building	Water level: O.P.+ 3,508 mm(Accumulated total increase:4,725 mm), decreased 174mm since 7:00 am on February 3
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,140mm(Accumulated total increase:3,866 mm), decreased 275mm since 7:00 am on February 3

Water level of the vertical shaft of the trench, T/B and R/B(As of 7:00 am on February 4)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on February 3)	O.P.+ 2,832 mm (14mm increase since 7:00 on February 3)	O.P.+ 4,265 mm (3mm decrease since 7:00 on February 3)
Unit 2	O.P.+ 3,054 mm (10mm increase since 7:00 on February 3)	O.P.+ 3,027 mm (8mm increase since 7:00 on February 3)	O.P.+ 3,196 mm (9mm increase since 7:00 on February 3)
Unit 3	O.P.+ 3,013 mm (17mm increase since 7:00 on February 3)	O.P.+ 2,942 mm (33mm increase since 7:00 on February 3)	O.P.+ 3,243 mm (33mm increase since 7:00 on February 3)
Unit 4	-	O.P.+ 2,932 mm (12mm increase since 7:00 on February 3)	O.P.+ 2,956 mm (5mm increase since 7:00 on February 3)

		February 3)	February 3)
--	--	-------------	-------------

<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	2/3	8:45	ND	ND	0.02
Approx. 330m south of Discharge Channel of 1F 1-4 u	2/3	8:30	ND	0.02	0.02
Around 3,4 u Discharge Channel of 2F	2/3	8:25	ND	0.02	0.02
Approx. 7km South of 2F1,2 u Discharge Channel	2/3	8:05	ND	0.02	0.02

· At other 2 re-measurement points of offshore Fukushima prefecture (sampled on February 1), all the major 6 nuclides (I-131, Cs-134 and Cs-137, Mn-54, Co-60, Ce-144) were ND. In order to lower the detection limit, we conducted re-measurement about upper layer at 15km offshore of Fukushima-Daiichi and upper layer at 15km offshore of Fukushima-Daini.

<Cooling of Spent Fuel Pools >(As of 11:00 am on February 4)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation ^{*1}	18.5
Unit 2	Circulating Cooling System	Under operation	12.7
Unit 3	Circulating Cooling System	Under operation ^{*2}	24.7
Unit 4	Circulating Cooling System	Under operation	25

*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.

<Water Injection to Pressure Containment Vessels > (As of 11:00 am on February 4)

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)	24.1	24.5	106.1 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx. 4.8 m ³ /h, Core Spray System: Approx. 3.7 m ³ /h)	46.8	64.8	111 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx. 3.0 m ³ /h, Core Spray System: Approx. 6.0 m ³ /h)	41.5	50.7	101.6 kPaabs

[Unit 1] 19:20 on February 3: Since the change on the rate of injection water to the reactor was found, we adjusted the injection rate from 4.7 to 4.5m³/h. (The rate of injecting water from reactor spray system is kept at 2.0m³/h)

[Unit 2] 19:20 on February 3: To improve reliability of water injection to the reactors, the injection line connecting to the reactor injection pump on the hill was replaced with polyethylene pipes and we

have been changing the route for reactor injection from feed water system to reactor core spray system in a stepwise manner. After completion of adjusting water flow amount as planned on February 2, tendency of temperature rise at the bottom of PCV was observed. Thus, we changed the injection amount into Unit 2 reactor through feed water system from 2.9 m³/h to 4.9 m³/h and changed that through reactor core spray system from 5.8 m³/h to 3.8 m³/h. As for the temperature rise, the temperature at the upper head of the bottom of PCV has risen to approx. 67.2 °C at the highest (as of 4 pm on February 4: reference), but currently, it is approx. 65.1 °C (as of 5 pm on February 4). The trend of the temperature seems to be going flat and we will monitor it continuously.

[Unit 3] Since the change of the injecting water rate was monitored, we adjusted the injecting water through reactor spray system from 5.5 to 6.0 m³/h. (The rate of injecting water from feeding system is kept at 3.0 m³/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.