December 1, 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]

・6/17 20:00 Full operation of radioactive material removal instruments started.

・6/24 12:00 Start of desalination facilities operation

・6/27 16:20 Circulating injection cooling started.

・8/7 16:11 Evaporative Concentration Facility has started full operation.

・8/19 19:33 We activated second cesium adsorption facility (System B) and started the treatment of accumulated water by the parallel operation of cesium adsorption instrument and decontamination instrument. At 19:41, the flow rate achieved steady state.

[Storage Facility]

・6/8～ Big 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)]	・11/30 18:03 – Transferring
Unit 3	・Unit 3T/B→Central Radioactive Waste Treatment Facility [Process Main Building]	・11/15 9:25 - Transferring
Unit 6	・Unit 6T/B→Temporary tanks	・12/1 10:00 - Transferring

Place transferred	Status of Water Level (As of December 1 at 7:00)
Process Main Building	Water level: O.P.+ 2,248 mm(Accumulated total increase:3,465 mm) 41 mm increase since 7:00 on November 30
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 1,767 mm(Accumulated total increase:2,493 mm) 258 mm decrease since 7:00 on November 30

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

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on November 30)	O.P.+ 3,385 mm (33mm increase since 7:00 on November 30)	O.P.+ 3,991 mm (28mm decrease since 7:00 on November 30)
Unit 2	O.P.+ 2,988 mm (8mm increase since 7:00 on November 30)	O.P.+ 2,999 mm (7mm increase since 7:00 on November 30)	O.P.+ 3,117 mm (7mm increase since 7:00 on November 30)
Unit 3	O.P.+ 3,210 mm (13mm decrease since 7:00 on November 30)	O.P.+ 2,954 mm (16mm decrease since 7:00 on November 30)	O.P.+ 3,170 mm (14mm decrease since 7:00 on November 30)
Unit 4	－	O.P.+ 2,985 mm (15mm decrease since 7:00 on November 30)	O.P.+ 2,989 mm (31mm decrease since 7:00 on November 30)

<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 5-6U, 1F	11/30	8:45	ND	0.04	0.02
Approx. 330m South of Discharge Channel of 1-4U, 1F	11/30	8:25	ND	0.02	ND
Approx. 7km South of Discharge Channel of 1-2U, 2F	11/30	8:00	ND	ND	0.02

・The major three nuclides (Iodine-131, cesium-134, 137) were not detected in the samples taken at 1 coast point and 10 offshore points of Fukushima Daiichi.

<Cooling of Spent Fuel Pools >(As of December 1 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation(11:22 on August 10 -)	17.0 ℃
Unit 2	Circulating Cooling System	Under operation(17:21 on May 31 -)	23.5 ℃
Unit 3	Circulating Cooling System	Under operation(18:33 on June 30 -)	19.8 ℃
Unit 4	Circulating Cooling System	Under operation(10:08 on July 31 -)	26 ℃

【Unit 2】・ 11/6～ We started operation of radioactive material decontamination instrument of spent fuel pool.

・ 11/30 23:13 The alarm went off at the alternative cooling system in the Fuel Pool Cooling and Filtering System indicating that the difference of the flow rate between at the inlet and at the outlet is large and the system automatically stopped its operation.

23:34 No leakage was confirmed by the site inspection. At 11:00 pm on the same day, the temperature of spent fuel pool was 22.7 C and the anticipated temperature increase was 0.3 C/h. As there is sufficient buffer, the inspection is scheduled during the morning of December 1.

・ 12/1 The inspection, the repair work and the cause analysis is rescheduled to December 2 as it turned out that the material preparation for such work needs time. We expect no major issue for the continued system outage as the temperature of spent fuel pool was 23.8 ℃the at 1:00 pm on December 1 (1.1℃ increase from 11:00 pm on November 30) and the increase is not material.

【Unit 3】・ 12/1 13:21 – 14:56 we injected hydrazine into spent fuel pool (approx. 2m^3).

【Unit 4】・ 11/29 10:58 in order to lower the salt density of the Spent Fuel Pools we fully activated the newly introduced ion exchanging device.

<Water Injection to Pressure Containment Vessels >(As of December 1 at 11:00)

Unit	Status of injecting water	Feed-water nozzle Temp.	Reactor pressure vessel Bottom temp.	Pressure of primary containment vessel
Unit 1	Injecting freshwater (Feed Water System: Approx.4.2 m^3/h)	43.3℃	44.4℃	117.4 kPaabs※
Unit 2	Injecting freshwater (Feed Water System: Approx.3.1 m^3/h, Core Spray System: Approx.4.2m^3/h)	71.6℃	70.5℃	111 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.2.0 m^3/h, Core Spray System: Approx.6.0 m^3/h)	60.1℃	68.5℃	101.6 kPaabs

【Unit 2】11/29 13:47 Due to installation works of the nitrogen injection line to the Reactor Pressure Vessel we suspended the operation of the nitrogen injection device.

14:21 Installation completed and operation of the nitrogen injection device restarted.

14:37 Reached fixed amount of 26Nm^3/h

11/30 13:45 Started nitrogen injection to the Reactor Pressure Vessel.

14:47 As we confirmed nitrogen injection had not increased, we resumed the operation. The cause is under investigation.

12/1 10:46 We started the nitrogen injection operation into the Reactor Pressure Vessel (The inspection thereafter revealed that the valve which was not described in the operation manual was not open.).

11:00 Injection amount reached the scheduled amount of 5 m^3/h.

12:00 Along with this operation, in order to balance the injected amount of nitrogen into the Reactor Pressure Vessel and the Primary Containment Vessel of Unit 2 and the exhaust amount from the gas management system, the exhaust amount from the system was adjusted from approx. 22 m^3/h to approx. 34 m^3/h.

【Unit 4】【Unit 5】【Unit 6】No particular changes in parameters.

<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.

End