Plant Status of Fukushima Daiichi Nuclear Power Station

November 16, 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 1	· Unit 1T/B Unit 2T/B	· 15:42 on November 11 -11/13 10:45 Transferring
Unit 2	·Unit 2T/B Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	·9:10 on November 10 - Transferring
Unit 3	· Unit 3T/B Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	
	· Unit 3T/B Central Radioactive Waste Treatment Facility [Process Main Building]	·9:25 on November 15 - Transferring
Unit 6	·Unit 6T/B Temporary tanks	·11/16 No plan of transfer

Place transferred	Status of Water Level (As of November 16 at 7:00)
Process Main Building	Water level: O.P.+ 1,485 mm(Accumulated total increase:2,702 mm) 34mm increase since 7:00 on November 15
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,087 mm(Accumulated total increase:2,813 mm) 58mm decrease since 7:00 on November 15

Water level of the vertical shaft of the trench, T/B and R/B(As of November 16 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm	O.P.+ 3,532 mm	O.P.+ 4,539 mm
	(No change since 7:00 on	(46mm increase since 7:00 on	(36mm decrease since 7:00 on
	November 15)	November 15)	November 15)

Unit 2	O.P.+ 3,131 mm	O.P.+ 3,141 mm	O.P.+ 3,241 mm
	(18mm decrease since 7:00 on	(14mm decrease since 7:00 on	(13mm decrease since 7:00 on
	November 15)	November 15)	November 15)
Unit 3	O.P.+ 3,308 mm	O.P.+ 3,083 mm	O.P.+ 3,286 mm
	(13mm decrease since 7:00 on	(27mm decrease since 7:00 on	(18mm decrease since 7:00 on
	November 15)	November 15)	November 15)
Unit 4	-	O.P.+ 3,099 mm (1mm increase since 7:00 on November 15)	O.P.+ 3,094 mm (15mm decrease since 7:00 on November 15)

Nuclide Analysis of Seawater(Reference) Since Oct 24, an approach to decrease the detection limits of radioactivity density was started.

Place of campling	Date of	Time of	Ratio of density limit (times)		
Place of sampling	sampling	sampling	I-131	Cs-134	Cs-137
Approx. 30m North of Discharge Channel	11/15	8:45	ND	0.10	0.07
of 5-6U of 1F	11/13	0.43	ND	0.10	0.07
Approx 330m South of Discharge Channel	11/15	8:30	ND	0.02	0.02
of 1-4u of 1F	11/15	6.30	טמו	0.02	0.02
3km offshore of northern Iwaki City (upper	11/14	7:10	ND	0.02	ND
layer)					

Others: Results of nuclide analysis (iodine-131, cesium-134 and cesium-137) of seawater sampled at 2 points at the seashore in Fukushima Prefecture on November 15 and at 10 points offshore Fukushima Prefecture on November 14 are all ND for the 3 major nuclides.

<Cooling of Spent Fuel Pools >(As of November 16 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 -)	19.5
Unit 2	Circulating Cooling System	Under operation(17:21 on May 31 -)	20.8
Unit 3	Circulating Cooling System	Under operation(18:33 on June 30 -)	20.3
Unit 4	Circulating Cooling System	Under operation(10:08 on July 31 -)	29

(Unit 2) · 11/6 ~ (Unit 6) · 11/15 ~

We started operation of radioactive material decontamination instrument of spent fuel pool. From November 15, due to cleanup work in order to prevent performance deterioration of pump caused by inletting sand or other materials piled up at the bottom of pump room of intake channel, Residual Heat Removal System (A) was shutdown, and stopped cooling the reactor. And Seawater pump of Equipment Water Cooing System (A) was shutdown, and stopped cooling the spent fuel pool. The stop is scheduled from 7:00 am to 5:00 pm everyday, and reactor water temperature will rise by approx. 12 per day, and spent fuel pool water temperature will rise by approx. 3 per day. (The cleanup work is planned to be finished in a week.)

<Water Injection to Pressure Containment Vessels >(As of November 16 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.7.7 m ³ /h)	35.5	36.5	123.0 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.2.8 m³/h,Core Spray System: Approx.7.3 m³/h)	65.8	68.1	109 kPaabs

Unit 3	Injecting freshwater (Feed Water System: Approx.2.7 m³/h,Core Spray System: Approx.8.1 m³/h)	57.4	68.8	101.5 kPaabs
--------	--	------	------	--------------

(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.
- ·11/16 9:33-11:41 Additional flow control valves were installed to the emergency water injection line to Unit 3 reactor to improve controllability of the flow rate. The water is injected through the permanent injection line, therefore the installation work gave no impact on the water injection.

End