Plant Status of Fukushima Daiichi Nuclear Power Station

August 19, 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]

[Heath	ieni raciily			
- 6/17	20:00	Full operation started.		
- 6/24	12:00	Treatment started at desalination facilities		
- 6/27	16:20	Circulating injection cooling started.		
- 7/2	18:00	We completed installing buffer tanks and resumed circulating injection cooling via buffer tanks.		
- 8/1	17:00	Water injection and water flow test of Cesium adsorption Instruments No.2 (SARRY) started.		
- 8/7	16:11	Evaporative Concentration Facility, which was additionally installed to Water Treatment Facility to produce fresh water from concentrated seawater generated at Water Desalination Facility, has started full operation.		
- 8/16	12:04	We stopped the operation of the water treatment facility and started the test operation of Cesium adsorption Instruments No.2.		
- 8/17	10:40	Water leakage from mechanical seal on Concentrated Water Transfer Pump for Evaporative Concentration Apparatus was found and the pump was manually stopped. Water injection to Desalination System, Evaporative Concentration Apparatus and Reactor is continued.		
- 8/19	9:43	Concentrated Water Transfer Pump for Evaporative Concentration Apparatus was started again, and at 12:00 noon we confirmed that operation status had no problem.		
	14:43	We started the operation of the water treatment system (We started treatment of accumulated water including highly concentrated radioactive materials by cesium adsorption Instrument, 2 nd cesium adsorption Instrument and decontamination instrument)		
	15:50	We confirmed flow rate reached normal level ,water treatment facility operated stably and operation status had no problem)		
- 8/19	14:00	We stopped operation of Water Treatment Facility in order to transition to parallel operation of the line from cesium adsorption instrument to decontamination instrument and the line of 2nd cesium adsorption instrument.		
	15:44	We started operation of the line from cesium adsorption instrument to decontamination instrument of Water Treatment Facility, and at 15:54 we confirmed that operation status had no problem.		

[Storage Facility]

From June 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		
2u	·2u Vertical Shaft of Trench → Central Radioactive Waste Treatment Facility [Process Main Building]	·8/18 16:19 ~ Transferring is in operation		
3u	·3u T/B → Central Radioactive Waste Treatment Facility [Process Main Building]	·8/19 8:51 ~ Transferring is in operation		
6u	·6u Turbine Building → temporary tanks	·8/19 10:00 ~ 13:00 transferred		
ou	·Temporary tanks →Mega Float	·8/19 No transfer		

Transfer to:	Status of Water Level (as of 7:00 on 8/19)	
Process Main Building	Water level: O.P.+ 5,214mm (Accumulated total increase: 6,431mm) 118mm increase from 8/18 7:00	
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,607mm (Accumulated total increase: 4,333mm) 31 mm decrease from 8/18 7:00	

Water level at the vertical shaft of the trench and T/B (as of 8/19 7:00)

Vertical Shaft of Trench (from top of grating to surface)	T/B				
O.P. <+850mm (>3,150mm), No change since 8/18 7:00	O.P. +4,920mm, No change since 8/18 7:00				
O.P. +3,588mm (412mm), 1mm decrease since 8/18	O.P. +3,606mm, No change since 8/18 7:00				
7:00					
O.P. +3,679mm (321mm), 22mm increase since 8/18	O.P. +3,593mm, 23mm increase since 8/18 7:00				
7:00					
-	O.P. +3,579mm, 26mm increase since 8/18 7:00				
	O.P. <+850mm (>3,150mm), No change since 8/18 7:00 O.P. +3,588mm (412mm), 1mm decrease since 8/18 7:00 O.P. +3,679mm (321mm), 22mm increase since 8/18				

Water level at Unit 1 R/B: 8/19 7:00, O.P. +4,527 mm, 10mm increase since 8/18 7:00.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Sampling Location	Date	Time	Ratio to Criteria (times)		
Sampling Location			lodine-131	Cesium-134	Cesium-137
North of Discharge Channel of 5-6u of 1F (approx. 30m north of 5-6u discharge channel)	8/18	9:50	ND	0.33	0.23

^{*} All the samples collected at 3 points along the coast and 14 points offshore of Fukushima Prefecture and 5 points offshore of Ibaraki Prefecture on August 18 were all below the detectable threshold.

<Cooling of Spent Fuel Pools> (as of 8/19 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22	34.0
2u	Circulating Cooling System	Operating from 5/31 17:21	37.0
3u	Circulating Cooling System	Operating from 6/30 18:33	33.9
4u	Circulating Cooling System	Operating from 7/31 10:08 ¹	44

<Water Injection to Pressure Containment Vessels> (as of 8/19 11:00)

Unit	Linit	Status of injecting water	Temp. of	Bottom of reactor	Pressure of Primary
	Offic	Status of Injecting water	feed-water nozzle	pressure vessel	Containment Vessel
	1u	Injecting freshwater(approx. 3.7m³/h)	101.6	92.1	129.5kPaabs
	2u	Injecting freshwater(approx. 3.5m³/h)	107.8	114.0	119kPaabs
	3u	Injecting freshwater (approx. 8.0m³/h)	107.3	104.0	101.5kPaabs

[Units 4] [Unit 5] [Units 6] [Common spent fuel pool] No particular changes in parameters.

• 8/19 15:30 We adjusted the rate of water injection of Unit 2 from 3.4m³/h to 3.8m³/h.

<Others>

- 4/10 ~ Clearance of outdoor rubbles by remote control to improve working conditions.

- 6/3 ~ Restoration works of port related facilities has been under operation.

- 7/12~ Construction work of installing steel pipe sheet pile against water leakage in the water intake channel.

- 6/28 ~ Main construction work for installing the cover for the reactor building of Unit 1
 - 8/10 Started setting up iron framework of the cover for the reactor building of Unit 1

- 8/19 We implemented sampling of spent fuel pool water of Unit 1 to 3

- 8/19 approx. 14:36 There was the earthquake occurred whose epicenter was offshore of Fukushima Prefecture and seismic intensity was M6.8. The situation after the earthquake were as follows:

- There were no abnormalities on the major parameter for each unit.
- There were no abnormalities on the outside power supply, water injection into reactors, Nitrogen injection into the reactors and cooling water of the spent fuel pools etc.
- There were no abnormalities on the data of monitoring posts.