Plant Status of Fukushima Daiichi Nuclear Power Station

July 7, 2011
Tokyo Electric Power Company

<Draining Water on Underground Floor of Turbine Building (T/B)>

◇ Construction status of accumulated radioactive water treatment system and storage tank facility

[Treatment Facility]

・6/17 20:00～ Full operation started.

・6/24 12:00～ Water treatment started at water desalination facilities

・6/27 16:20 Circulating injection cooling started with treated water in the water treatment facilities in addition to water injection from filtration tank in Units 1 to 3.

・7/1 7:27 We stopped cooling by circulated water and switched to cooling by injecting filtrate water only in order to install the tank for injection to the reactor (buffer tank).

15:52 We restarted the desalination facility after preparation of another tank for treated water.

・7/2 18:00 We stopped transfer pump due to tank capacity of buffer tank for treated water.

・7/3 20:17～ We temporarily stopped transfer pump in order to adjust the water level in buffer tank.
7/4 17:18

・7/6 6:53～ We temporarily stopped transfer pump in order to adjust the water level in buffer tank.
7/7 4:52

・7/6 8:00～ We temporarily suspended operation of the desalination facility as the water level of the storage
7/7 11:09 tank at the upstream of the desalination facility went down to the lower limit.

※Water treatment was temporarily suspended for the flashing to change vessels. June 23～26, from time to time. June 28～30, from time to time. July 2～3 and 5, from time to time. July 7: 11:00 stopped water treatment facility, 12:50 started pump, 13:02 resume operation of water treatment facility.

[Storage Facility]

June 8, big tanks to store and to keep treated or contaminated water have been transferred and installed sequentially

◇Accumulated water in vertical shafts of trenches and at basement level of building (as of 7/7 7:00)

Unit	Draining water source → Place transferred	Status
2u	2u Vertical Shaft of Trench → Process Main Building, Central Radioactive Waste Treatment Facility (4/19 10:08am～5/26 4:01pm, 6/4 6:39pm～6/8 2:20pm, 6/8 6:03pm～6/16 8:40am, 6/22 9:56am～6/27 9:02am, 6/27 5:07pm～)	[Process Main Building] Water level: O.P.+4,917 mm (13 mm increase from 7/6 7:00) (Accumulated total increase : 6,134 mm)
3u	3u T/B → Miscellaneous Solid Waste Volume Reduction Treatment Building of Central Radioactive Waste Treatment Facility (5/17 18:04～5/25 9:10, 6/18 13:31～6/20 0:02) 3u T/B → Process Main Building of Central Radioactive Waste	[Miscellaneous Solid Waste Volume Reduction Treatment Building] Water level: O.P.+3,310 mm

	Treatment Facility (6/14 10:05～6/16 8:46, 6/21 15:32～, 6/27 15:44~6/28 9:58 and 6/30 8:56～)	(19 mm increase from 7/6 7:00) (Accumulated total increase:4,036mm)
6u	6u Turbine Building → temporary tanks 5/1～6/22 as needed, 6/30 15:00～19:00, 7/1 10:00～7/3 16:00, 7/4 10:00～16:00, 7/5 10:30～16:30, 7/6 10:00～ Temporary tanks →Mega Float 6:30 13:00～19:00, 7/1 10:00～7/3 16:00 , 7/4 13:30～17:00, 7/5 10:00～17:00, 7/7 10:09～	

◇Water level at the vertical shaft of the trench and T/B (as of 7:00 on July 7)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 7/6 7:00	O.P. +4,920mm, No change since 7/6 7:00
2u	O.P. +3,402mm (598mm), 28mm decrease since 7/6 7:00	O.P. +3,407mm, 26mm decrease since 7/6 7:00
3u	O.P. +3,784mm (216mm), 11mm decrease since 7/6 7:00m	O.P. +3,690mm, 17mm decrease since 7/6 7:00
4u	—	O.P. +3,705mm, 13mm decrease since 7/6 7:00

・ Water level at Unit 1 R/B: 7/7 7:00, O.P. +4,363mm, 25mm decrease since 7/6 7:00.

<Monitoring of Radioactive Materials>

◇ Nuclide Analysis of Seawater (Reference)

Density limit by the announcement of Reactor Regulation: I-131: 40Bq/L*, Cs-134: 60Bq/L, Cs-137: 90Bq/L

Sampling Location	Date	Time	Ratio to Criteria (times)		
			Iodine-131	Cecium-134	Cecium-137
Discharge channel, Fukushima Daini (about 10km from Fukushima Daiichi)	7/5	8:25	ND	ND	0.06

Below lower measurable level at 14 locations below (27 sampling points: shore (upper layer), offshore 3km, 5km, 15km (upper and lower layer), 30km (upper, middle, lower layer) sampled on July 6)

30m north of water discharge channel for Units 5 & 6, 1F / 330m south of water discharge channel for Units 1-4, 1F / Around Iwasawa shore, Naraha town (16km from 1F) / 3km･5km offshore of Soma City / 5km offshore of Kashima, Minami Soma city / 15km･30km offshore of Ukedogawa, Namie town / 15km offshore of 1F / 15km offshore of 2F / 15km offshore of Iwasawa shore, Naraha town / 15km offshore of Hirono town / 15km･30km offshore of Minami Soma city

<Water Injection and Spraying to Spent Fuel Pools>

Unit	Coolong type	Status of cooling	Temperature of water in Pool
1u	Fuel Pool Cooling and Filtering System	No plan on 7/7	-
2u	Circulating Cooling System	Operating from 5/31	34.0℃ (7/7 11:00)
3u	Circulating Cooling System	Operating from 6/30	30.8℃(7/7 11:00)

		18:33	
4u	Alternative Injection System	No plan on 7/7	84-85℃(7/6 16:30)

<Water Injection to Reactor Pressure Vessels> (at 11:00, 7/7)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.7m^3/h) *	117.0℃	102.2℃
2u	Injecting freshwater (approx. 3.5m^3/h)	112.2℃	122.9℃
3u	Injecting freshwater (approx. 8.9m^3/h)	152.5℃	122.4℃

【Units 5】【Unit 4】【Units 6】【Common spent fuel pool】 No particular changes on parameters.

<Injection of Nitrogen Gas into the Primary Containment Vessel> (at 11:00, 7/7)

Unit	Pressure of Primary Containment Vessel	Total volume of injected Nitrogen *1
1u	156.3kPaabs(4/7 1:20) => 143.4kPaabs	Approx.60,300m^3
2u	20kPaabs(6/28 19:00) => 20kPaabs *2	Approx.2,700m^3

*1: approximate figure *2: monitoring the status

<Others>

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

・5/10 ～ Clearing of rubbles in and around Unit 3 reactor building etc using robots.

・6/3～ Restoration works of port related facilities carried out.

・6/7～6/20 Installation of support structure into the bottom of fuel spent pool of reactor building of Unit 4.

・6/21～ Concrete filling and grout started.

・6/28～ Main construction work for installing the cover for the reactor building of Unit 1 started.

7/5 23:00 Basement panel of reactor building cover left Onahama CC port and arrived Fukushima Daiichi at 7/6 8:30.

・6/30 Construction of temporary tide embankment completed.

・7/1 Cleaning by a robot to reduce the radioactive level in the 1st floor of the reactor building of Unit 3

・7/2 Measurement of radiation by a robot in the 1st floor of the reactor building of Unit 3

・7/3～7/4 Under construction for installation of steal plates in the 1st floor of the reactor building of Unit 3

・7/4 Water injection into the reactor well and the equipment storage pool of Unit 4

・7/6 15:24～ Robot entrance to restricted area for the survey of nitrogen injection to Unit 3.

17:10

・7/6 Valves closed to establish circulating cooling system of Spent Fuel Pool of Unit 4.

・7/7～ Planning to begin the preparation work for checking the soundness of piping for Residual Heat Removal System to establish the circulating cooling system Spent Fuel Pool, Unit 4.

END