Plant Status of Fukushima Daiichi Nuclear Power Station

July 9, 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 started.

・6/24 12:00 Treatment started at desalination facilities

・6/27 16:20 Circulating injection cooling started (In order to inject water to reactors of Units 1 to 3, we use water injected from filtrate water tanks in addition to treated water in water treatment facilities)

・7/2 18:00 We completed installing buffer tanks and resumed circulating injection cooling via buffer tanks.

・7/6 8:00～ 7/7 11:09 We temporarily suspended operation of the desalination facility as the water level of the storage tank at the upstream of the desalination facility went down to the lower limit. Then we noticed the water level of waste supply tank of the facility did not increase. After we extracted waste water from suppression pool water surge tank (B) and switched from SPT (B) pumps to back-up ones, we confirmed the water level increased.

7/7 14:28～17:06 We temporarily suspended desalination facilities, as we investigated the problems of extracting pump(s) of suppression pool water surge tank (B)disorder of pumps

※Water treatment was temporarily suspended for flashing in order to change vessels. June 23～26, June 28～30, July 2～3, 5, 7 and 8.

[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 (as of 7/9 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.+4,801 mm (71 mm decrease from 7/8 7:00) (Accumulated total increase : 6,018 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.+3,345 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 8:56～7/9 14:49)	(18 mm increase from 7/8 7:00) (Accumulated total increase: 4,071mm)
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 10:00～17:00, 7/7 10:30～16:30 7/8 10:30～16:30, 7/9 10:30～16:30 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 10:09～17:00, 7/8 10:30～17:00, 7/9 10:00～17:00	

◇Water level at the vertical shaft of the trench and T/B (as of 7:00 on July 9)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 7/8 7:00	O.P. +4,920mm, No change since 7/8 7:00
2u	O.P. +3,458mm (542mm), 38mm increase since 7/8 7:00	O.P. +3,463mm, 38mm increase since 7/8 7:00
3u	O.P. +3,759mm (241mm), 11mm decrease since 7/8 7:00m	O.P. +3,660mm, 16mm decrease since 7/8 7:00
4u	―	O.P. +3,674mm, 11mm decrease since 7/8 7:00

・ Water level at Unit 1 R/B: 7/9 7:00, O.P. +4,324mm, 18mm decrease since 7/8 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
Around North discharge channel, Fukushima Daini (about 10 km from Fukushima Daiichi)	7/8	8:15	ND	ND	0.05
Around Iwasawa Shore, Naraha Town (about 16km from Fukushima Daiichi)	7/8	7:45	ND	0.10	0.06

Lower than measurable level at 7 locations below (13 sampling points: shore (upper layer), 15 km offshore of Numanouchi (upper, middle, lower layer), other offshore approx. 5km, 15km (upper and lower layer) sampled on 7/8)

Approx. 30m north of discharge channel of Unit 5 and 6 of Fukushima Daiichi, approx. 330m south of discharge channel of Unit 1-4 of Fukushima Daiichi, approx. 5km and 15 km offshore of Numanouchi, approx. 15 km offshore of Namie-machi, Ukedogawa offshore, approx. 15km offshore of Fukushima Daiichi, approx. 15km offshore of Fukushima Daini

Below measureable level at 6 locations below in Miyagi Prefecture (18 sampling points (upper, middle, lower layer) sampled on 7/8)

Ishinomaki harbor, offhosre of east of Kinkasan, offshore of south of Kinkasan, Shichigahama offshore, offshore of center of Sendai harbor, Abukuma-gawa offshore

<Cooling of Spent Fuel Pools>

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Fuel Pool Cooling and Filtering System	No plan on 7/9	-
2u	Circulating Cooling System	Operating from 5/31	34.0℃ (7/9 11:00)
3u	Circulating Cooling System	Operating from 6/30 18:33	32.2℃(7/9 11:00)
4u	Alternative Injection System	No plan on 79	82℃(7/9 16:00)※

※Due to temporary stop of power supply to remote monitoring system, no data of water temperature are and will be available (from 7/9 to 7/11 (planned))

<Water Injection to Reactor Pressure Vessels> (at 11:00, 7/9)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.5m^3/h) *	117.3℃	102.6℃
2u	Injecting freshwater (approx. 3.4m^3/h)	112.2℃	120.4℃
3u	Injecting freshwater (approx. 9.0m^3/h)	151.9℃	125.0℃

【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, 7/9)

Unit	Pressure of Primary Containment Vessel	Total volume of injected Nitrogen *1
1u	156.3kPaabs(4/7 1:20) => 144.1kPaabs	Approx.61,600m^3
2u	20kPaabs(6/28 19:00) => 20kPaabs *2	Approx.3,300m^3

*1: approximate figure *2: monitoring the status

<Others>

・4/10 ～ Clearance of outdoor rubbles by 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 has been under operation.

・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.

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

・7/3～7/4 Installing steal plates on the 1st floor of the reactor building of Unit 3

・7/6 Robot entrance for the survey of nitrogen injection to Unit 3

・7/8 13:35～13:44 Entrance for the survey of nitrogen injection to Unit 3.

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

・7/8 Conducted a water flow test to confirm the soundness of Residual Heat Removal System piping to establish circulating cooling system of Spent Fuel Pool of Unit 4

・7/8 Conducted dose measurement by a robot at the second and third floors of Reactor Building of Unit 2

END