

Plant Status of Fukushima Daiichi Nuclear Power Station

July 8, 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 ~ 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 switched from SPT (B) pumps to back-up ones, we confirmed the water level increased.
- 7/7 11:09
- 7/7 14:28 ~ We temporarily suspended desalination facilities, as we investigated disorder of pumps
17:06
- 7/7 23:30 ~ We temporarily suspended treated water transfer pumps, as the water level of treated water
7/8 2:45 temporary storage tanks reached the lower limit.
- 7/8 4:44 ~ We temporarily suspended treated water transfer pumps, as the water level of treated water
13:51 temporary storage tanks reached 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, 5 and 7 from time to time. July 8: 10:00 stopped water treatment facility, 12:15 resumed operation of water treatment facility.

[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 7/8 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.+4,872 mm (45 mm decrease from 7/7 7:00) (Accumulated total increase : 6,089 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.+3,327 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~)	(17 mm increase from 7/7 7:00) (Accumulated total increase: 4,053mm)
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~ 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 10:00~	

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

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 7/7 7:00	O.P. +4,920mm, No change since 7/7 7:00
2u	O.P. +3,420mm (590mm), 18mm increase since 7/7 7:00	O.P. +3,425mm, 18mm increase since 7/7 7:00
3u	O.P. +3,770mm (230mm), 14mm decrease since 7/7 7:00m	O.P. +3,676mm, 14mm decrease since 7/7 7:00
4u	—	O.P. +3,685mm, 20mm decrease since 7/7 7:00

- Water level at Unit 1 R/B: 7/8 7:00, O.P. +4,342mm, 21mm decrease since 7/7 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	Cesium-134	Cesium-137
Around Iwasawa Shore, Naraha Town (about 16km from Fukushima Daiichi)	7/7	7:50	ND	ND	0.05

Below lower measurable level at 14 locations below (28 sampling points: shore (upper layer), offshore 3km, 5km, 15km (upper and lower layer), 30km (upper, middle, lower layer) sampled on July 7)

<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 7/8	-
2u	Circulating Cooling System	Operating from 5/31	34.0°C (7/8 11:00)
3u	Circulating Cooling System	Operating from 6/30 18:33 * Today temporarily suspended (7/8 8:20~14:24)	30.9°C(7/8 11:00)
4u	Alternative Injection System	No plan on 7/8	84-85°C(7/7 16:00)

<Water Injection to Reactor Pressure Vessels> (at 11:00, 7/8)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.6m ³ /h) *	117.1°C	102.4°C
2u	Injecting freshwater (approx. 3.4m ³ /h)	112.2°C	119.1°C
3u	Injecting freshwater (approx. 9.0m ³ /h)	153.0°C	123.5°C

【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, 7/8)

Unit	Pressure of Primary Containment Vessel	Total volume of injected Nitrogen **1
1u	156.3kPaabs(4/7 1:20) => 143.8kPaabs	Approx.61,000m ³
2u	20kPaabs(6/28 19:00) => 20kPaabs **2	Approx.3,000m 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.
- 7/1~ Cleaning by a robot to reduce the radioactive level in the 1st floor of the reactor building of Unit 3
- 7/3~7/4 Installing steal plates in 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~ Entrance for the survey of nitrogen injection to Unit 3.
13:44
- 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
- 7/7 Conducted sampling of Spent Fuel Pool of Unit 3
- 7/8 Conducted dose measurement by a robot at the second and third floors of Reactor Building of Unit 2
- 7/8 8:22~ Filled a reactor well and a drier separator pool with approx. 165 tons of water
13:52
- 7/8 8:20~ Suspended Alternative Cooling equipment of Spent Fuel Pool of Unit 3 due to relocation of
14:24 cables

END