Plant Status of Fukushima Daiichi Nuclear Power Station

July 4, 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.

・6/30 9:00 We stopped desalination facility to treat condensed salt water in the treated water receipt tank.

14:36 Water treatment facility was stopped automatically. At 18:50 we resumed the operation after adjusting the settings of water level value in of Coagulation Setting Facility treated water tank.

・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.

・7/3 20:17 We stopped transfer pump due to tank capacity for treated water.

※Water treatment was temporarily suspended for the flashing to change vessels during 13:00-14:00 on June 23, 10:00-12:50 on June 24, 10:00-15:00 on June 25, 10:00-18:10 on June 26, 10:06~12:24 on June 28, 10:45-14:13 on June 29, 10:46- 13:35 on June 30, 10:30- 13:45 on July 2 and 10:39- 12:50 on July 3.

[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 7/4 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.+4,859 mm (25 mm increase from 7/3 7:00) (Accumulated total increase : 6,076 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 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～)	[Miscellaneous Solid Waste Volume Reduction Treatment Building] Water level: O.P.+3,255m (19 mm increase from 7/3 7:00) (Accumulated total increase:3,982mm)

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～ Temporary tanks →Mega Float 6:30 13:00～19:00, 7/1 10:00～7/3 16:00 , 7/4 13:30～	

◇Water level at the vertical shaft of the trench and T/B (as of 7:00 on July 4)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 7/3 7:00	O.P. +4,920mm, No change since 7/3 7:00
2u	O.P. +3,481mm (519mm), 27mm decrease since 7/3 7:00	O.P. +3,482mm, 26mm decrease since 7/3 7:00
3u	O.P. +3,817mm (183mm), 11mm decrease since 7/3 7:00m	O.P. +3,738mm, 15mm decrease since 7/3 7:00
4u	—	O.P. +3,748mm, 11mm decrease since 7/3 7:00

- Water level at Unit 1 R/B: 7/4 7:00, O.P. +4,442mm, 30mm decrease since 7/3 7:00.
- Unit 1-4: On June 29, the blockage to the extension of the pit as a countermeasure for polluted water leakage, and installation of sliding concrete plate to the intake channel were completed.

<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 10 km from Fukushima Daiichi)	7/3	8:10	ND	0.08	0.08
Iwasawa coast of Naraha Town (about 16 km from Fukushima Daiichi)	7/3	7:45	ND	ND	0.06

Not detected at following two points
30m north of 5～6u Discharge channel, Fukushima Daiichi
330m south of 1～4u Discharge channel, Fukushima Daiichi

<Water Injection and Spraying to Spent Fuel Pools>

- 5/31～, circulating cooling system for 2u Spent Fuel Pool is in service. Pool water temperature at 11:00, July 4 was 34.5℃.
- 6/30～, commissioning of 3u Spent Fuel Pool Circulating Cooling System is in service. Pool water temperature at 11:00, July 4 was 32.9℃.

<Water Injection to Reactor Pressure Vessels> (as at 7/4 11:00)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.9m^3/h) *	117.9℃	102.5℃
2u	Injecting freshwater (approx. 3.5m^3/h)	112.7℃	120.9℃

3u	Injecting freshwater (approx. 9.0m^3/h)	149.3℃*	121.3℃

7/4 water injection rate changed (Unit 1 8:13～ 3.0 →7.5 →3.8 ㎥/h)

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

<Injection of Nitrogen Gas into the Primary Containment Vessel of Unit 1> * Accumulated volume of nitrogen gas is an estimated value.

- Primary Containment Vessel pressure of Unit 1: 156.3 kPaabs (4/7 1:20) → 142.7 kPaabs, (7/4 11:00) approx. 58,300m³.
- Primary Containment Vessel pressure of Unit 2: 5 kPaabs (6/28 19:00) → 20 kPaabs, (7/4 11:00) approx. 1,800m³.

<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.
･6/25	Airflow survey was conducted near the airlock and the large equipment carry-in entrance, reactor buildings, Units 1&2.
･6/28	Injection water into the reactor well of reactor building of Unit 4
･6/28～	Main construction work for installing the cover for the reactor building of Unit 1 started.
･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	Under construction for installation of steal plates in the 1st floor of the reactor building of Unit 3
･7/4 9:13～	Water injection into the reactor well and the equipment storage pool of Unit 4

END