Plant Status of Fukushima Daiichi Nuclear Power Station

July 2, 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.

・6/29 9:30 Leakage from the drain at the bottom of temporary storage tank for concentrated water of desalination facilities confirmed.

10:30 Leakage stopped by mounting a cap.

10:59 Pumps stopped to replace hoses at the outlet of water transfer pumps

13:33 After the replacement, circulating injection cooling resumed.

14:53 An alarm indicating leakage at On-Site Bunker Building was reported and the operation of water treatment facility stopped. At 18:45 we resumed the operation.

18:54 Radioactive material treatment facility (Cesium adsorption instrument and coagulation settling facility) stopped due to trouble of combined operation. 21:45 restarted.

・6/30 9:00 Since the water receipt tank was filled up with the water, we stopped desalination facility.

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 Since we were ready to use another water receipt tank, we restarted the water desalinations.

※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, and 10:30-13:45 on July 2.

[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 7/2 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.+4,803 mm (2 mm decrease from 7/1 7:00am) (Accumulated total increase : 6,020 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.+3,216m (20 mm increase from 7/1 7:00am) (Accumulated total increase:3,942mm)
6u	6u Turbine Building → temporary tanks 5/1～6/22 as needed, 6/30 15:00～19:00, 7/1 10:00～ Temporary tanks →Mega Float 6:30 13:00～19:00, 7/1 10:00～	

◇Water level at the vertical shaft of the trench and T/B (as of 7/2 7:00)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 7/1 7:00am	O.P. +4,920mm, No change since 7/1 7:00am
2u	O.P. +3,538mm (462mm), 28mm decrease since 7/1 7:00am	O.P. +3,535mm, 28mm decrease since 7/1 7:00am
3u	O.P. +3,839mm (161mm), 9mm increase since 7/1 7:00am	O.P. +3,768mm 16mm decrease since 7/1 7:00am
4u	—	O.P. +3,776mm, 14mm decrease since 7/1 7:00am

- Water level at Unit 1 R/B: 7/2 7:00am, O.P. +4,475mm, 30mm decrease since 7/1 7:00am.
- Unit 2 and 3, blockage to the extension of the pit and the unidentified flow path is underway.
  (Blockage work of pits similar to outflow event or whose closure would ensure flow routes completed by 6/10)

<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
30m north of 5～6u Discharge Canal, Fukushima Daiichi	7/1	11:30	0.23	ND	ND
330m south of 1～4u Discharge Canal, Fukushima Daiichi	7/1	8:15	ND	0.08	ND
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	7/1	7:45	ND	0.07	0.06

All the data at the following 9 locations (sampled at 19 points in total: seashore (upper), 3.8 km offshore (upper and lower layer), 15,30km (upper, middle and lower layer)on July 1) are below the detection limit;

Approx. 30m north from Discharge Canal of 5u and 6u of Fukushima Daiichi,
Approx. 3 km offshore of Haramachi Area,
Approx. 3.8 km offshore of Kodaka Area,

Approx.3.8 km offshore of Iwasawa seashore, and
Approx. 5, 15 and 30 km offshore of Numanouchi

<Water Injection and Spraying to Spent Fuel Pools>

Result of yesterday	Unit 4	11:30 ～11:55: spraying fresh water using alternate water spraying facilities.
Today's plan	-	No action plan

- 5/31～, circulating cooling system for 2u Spent Fuel Pool is in service. Pool water temperature at 11:00 am, July 2 was 34℃.
- 6/30 commissioning of 3u Spent Fuel Pool Circulating Cooling System started. Pool water temperature at 11:00 am, July 2 was 38℃.
- 7/2 No water injection for 1u and 4u Spent Fuel Pool.

<Water Injection to Reactor Pressure Vessels> (as at 7/2 11:00)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.5m^3/h) *	117.7℃	102.2℃
2u	Injecting freshwater (approx. 3.5m^3/h)	112.8℃	124.9℃
3u	Injecting freshwater (approx. 9.0m^3/h)	153.6℃*	123.5℃

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

<Injection of Nitrogen Gas into the Primary Containment Vessel>

* Cumulative amount of injected Nitrogen gas is a preliminary figure.

- Primary Containment Vessel pressure of Unit 1: 156.3kPaabs (4/7 1:20am) → 141.8 kPaabs, (7/2 11:00) approx. 57,000m³.
- Primary Containment Vessel pressure of Unit 2: 5kPaabs (6/28 7:00pm) → 25 kPaabs, (7/2 11:00) approx 1,100 m³

<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 using robot to decrease the radiation dose at the first floor of Unit 3 Reactor Building.
- 7/2 Measurement of radiation dose using robot at the first floor of Unit 3 Reactor Building.

END