

Plant Status of Fukushima Daiichi Nuclear Power Station

June 30, 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 Unit 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.
 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 Desalination facility stopped due to treatment of condensed salt water of treated water receipt tank.

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 and 10:46- on June 30.

[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 6/30 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.+4,731 mm (41 mm decrease from 6/29 7:00am) (Accumulated total increase :)

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)	5,948 mm) [Miscellaneous Solid Waste Volume Reduction Treatment Building] Water level: O.P.+3,176m (21 mm increase from 6/29 7:00am) (Accumulated total increase:3,902mm)
	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 ~)	
6u	6u Turbine Building → temporary tanks (5/1 ~ 6/22 on demand basis)	

- 6/30 13:00 ~ Transfer of low level accumulated water, which transferred from 6u T/B to temporary tank, started.

Water level at the vertical shaft of the trench and T/B (as of 6/29 7:00)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 6/29 7:00am	O.P. +4,920mm, No change since 6/29 7:00am
2u	O.P. +3,601mm (399mm), 31mm decrease since 6/29 7:00am	O.P. +3,595mm, 20mm decrease since 6/29 7:00am
3u	O.P. +3,854mm (146mm), 23mm increase since 6/29 7:00am	O.P. +3,803mm 21mm increase since 6/29 7:00am
4u	-	O.P. +3,790mm, 13mm increase since 6/29 7:00am

- Water level at Unit 1 R/B: 6/30 7:00am, O.P. +4,527mm, 12mm decrease since 6/29 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	Cesium-134	Cesium-137
30m north of 5 ~ 6u Discharge Canal, Fukushima Daiichi	6/29	9:15 am	ND/ND	0.82	0.57
330m south of 1 ~ 4u Discharge Canal, Fukushima Daiichi	6/29	8:55 am	ND/ND	0.35	0.21
Around north water discharge channel, Fukushima Daini (10km from Fukushima Daiichi)	6/29	8:25 am	ND	0.11	0.06
Iwasawa shore, Naraha town (16km from	6/29	7:55 am	ND	ND	0.08

Fukushima Daiichi)					
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All the data of the following 5 locations (10 points in total: 3, 8 km offshore (upper and lower layer) are below the detection limit.

- Haramachi-ku Minami-soma City: 3km offshore,
- Kotaka-ku Minami-soma City: 3,8km offshore
- Iwasawa sea shore Naraha-town: 3,8 km offshore

<Water Injection and Spraying to Spent Fuel Pools>

Result of yesterday	Unit 3 Unit 4	14:45 ~ 15:53: injection of fresh water from fuel pool cooling and filtering system. 11:47 ~ 12:01: spraying water using alternate water spraying facilities. (approx 7ton)
Result of today	Unit 4	11:30 ~ 11:55: spraying fresh water using alternate water spraying facilities.

- 5/31 ~ , circulating cooling system for 2u Spent Fuel Pool is in service. Pool water temperature at 11:00 am, June 30: was 34 .
- 6/30 3u Spent Fuel Pool Circulating Cooling System plan to start operation after commissioning.

<Water Injection to Reactor Pressure Vessels> (as at 6/30 11:00)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.7m ³ /h)*	117.4	102.0
2u	Injecting freshwater (approx. 3.8m ³ /h)	112.6	128.2
3u	Injecting freshwater (approx. 9.0 ~ 9.1m ³ /h)	154.5 *	126.7

[Unit 4] Units 5] [Units 6] [Common spent fuel pool] No particular changes on parameters.

<Injection of Nitrogen Gas into the Primary Containment Vessel of Unit 1>

- Primary Containment Vessel pressure: 156.3 (4/7 1:20am) → 140.6 kPaabs, (6/30 11:00) approx. 55,600m³.
- 6/28 Nitrogen gas injection started to containment vessel of Unit 2.

<Others>

- 4/10 ~ Clearance of outdoor rubbles by a remote control to improve working conditions.
- 5/10 ~ Clearing of rubbles in front of carry-in gate for large stuff of reactor building of Unit 3 by 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, R/B, Units 1&2.
- 6/28 Injection water into the reactor well of reactor building of Unit 4
- 6/28 Construction of the main body of the building for installing the cover for the reactor building of Unit 1 started.

END