Plant Status of Fukushima Daiichi Nuclear Power Station

June 17, 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]

- From 3:45 am to 2:00 pm, on June 14: stand-alone commissioning of Cesium absorption Instruments (Kurion)
- From 1:10 pm to 8:35 pm on June 15, decontamination instruments (AREVA) stand-alone commissioning.
- From 10:40 pm on June 15 to 0:20 am on June 16, both Cesium absorption instruments and decontamination ones commissioned in combination.
- From 0:20 am on June 16, the overall treatment facility started operation.
- From 7:20 pm on June 16, the water treatment system was stopped automatically. The leakage was found from the cesium adsorption instruments. The repairing work was started.
- From 10:00 am on June 17, the repairing work of the instruments was completed. Water was fed into the instruments for test.
- From 01:00 pm on June 17, the cesium adsorption instruments resumed the test operation.

[Storage Facility]

- From June 8, big tanks to store and keep treated or contaminated water are being transferred and installed sequentially.

◇Treatment status of accumulated water in vertical shafts of trenches and at basement level of each building (as of 7:00 am on June 17)

Unit	Draining water source -> place transferred	Status
Unit 1	Unit 1 Condenser -> CST (10:33 am, June 15 ～ 9:52 am, June 16)	[Process Main Building] Water level: O.P.+5,006 mm (25 mm increase from 7:00 am, June 16) Accumulated total increase in water level: 6,223 mm [Miscellaneous Solid Waste Volume Reduction Treatment Building] Water level: O.P.+2,363 mm (12 mm increase from 7:00 am, June 16) Accumulated total increase in water level: 3,089 mm
Unit 2	Unit 2 Vertical Shaft of Trench -> Process Main Building of Central Radioactive Waste Treatment Facility (10:08 am, April 19 ～ 4:01 pm, May 26 and 6:39 pm, June 4 ～ 2:20 pm, June 8, 6:03 pm, June 8 ～8:40 am, June 16) -> Unit 1 condenser (2:20 pm～2:59 pm, June 17*) * Water transfer was suspended due to failure of pump.	
Unit 3	Unit 3 Turbine Building -> Miscellaneous Solid Waste Volume Reduction Treatment Building of Central Radioactive Waste Treatment Facility (from 6:04 pm, May 17～9:10am, May 25) Unit 3 Turbine Building	

	-> Process Main Building of Central Radioactive Waste Treatment Facility (3:30pm, June 11 ～ 5:01pm, June 12, 10:05 am on June 14～8:46 am on June 16)	
Unit 6	Unit 6 Turbine Building → temporary tanks (from May 1 on demand basis, from 2:45 pm on June 5 to 6:00 pm on June 8, from 9:00 am on June 9 on demand basis, and from 10:00 am on June 17)	

* We announced result of transfer at Unit 6 as 10:09 am ～ 4:00 pm on July 15, while 10:00 am ～ 4:00 pm on July 15 was right. Please accept our sincere apologies for this inconvenience.

◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, June 17)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
Unit 1	O.P. below +850 mm (>3,150mm) No change from 7:00 am, June 16	O.P. +4,920 mm No change from 7:00 am, June 16
Unit 2	O.P. +3,708 mm (292mm) 45 mm increase since 7:00 am, June 15	O.P. +3,689 mm 42 mm increase since 7:00 am, June 16
Unit 3	O.P. +3,841 mm (159 mm) 19 mm increase since 7:00 am, June 16	O.P. +3,826 mm 27mm increase since 7:00 am, June 16
Unit 4	—	O.P. +3,815mm 12 mm decrease since 7:00 am, June 16

- Water level at Unit 1 Reactor Building: as of 7:00 am on June 16, O.P. +4,418mm, 47mm decrease since 7:00 am, June 17
- With regard to Unit 2 and 3, blockage work to the extension of the pit and the pit whose flow path is not identified is underway.
  (Blockage work of pits where incidents similar to outflow ones occurred or whose closure would ensure flow routes was completed by June 10.)

<Monitoring of Radioactive Materials>

◇ Nuclide Analysis of Seawater (Reference purpose)

Density limit by the announcement of Reactor Regulation: I-131: 50Bq/L, Cs-134: 60Bq/L, Cs-137: 90Bq/L

Sampling Location	Date	Time	Ratio to Criteria (times)		
			Iodine-131	Cecium-134	Cecium-137
Approx. 30m north to Discharge Canal of Units 5 & 6 of Fukushima Daiichi	6/16	9:05/13:15	ND/ND	0.77/0.68	0.57/0.43
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi	6/16	8:50/13:00	ND/ND	0.33/0.40	0.26/0.23
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	6/16	7:55	ND	0.12	0.11

Approx. 3km offshore of Natsuigawa river	6/16	5:15/5:15	ND/ND	ND/0.08	ND/ND
Approx. 3km offshore of Numanouchi	6/16	5:25/5:25	ND/ND	0.08/ND	ND/ND
Approx. 15km offshore of Ukedogawa river	6/16	9:25/9:25	ND/ND	0.08/ND	ND/ND

※ Analyses Results Left: Upper Layer, Right: Lower Layer

All the data in the following ten locations (nineteen points in total: where data were collected from upper and lower layers [3 / 8 / 15 km offshore]) were below the detectable limit

- Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)
- Approx. 3km offshore of north of Iwaki city
- Approx. 3km offshore of Onahama port
- Approx. 3km offshore of Ena
- Approx. 3km offshore of Toyoma
- Approx. 15km offshore of Minami-soma city
- Approx. 15km offshore of Fukushima Daiichi NPS
- Approx. 15km offshore of Fukushima Daini NPS
- Approx. 15km offshore of Iwasawa sea coast
- Approx. 15km offshore of Hirono town

<Water Injection and Spraying to Spent Fuel Pools>

Results	Unit 4	From 13:14 to 15:44 on June 16, water and hydrazine were injected by alternative feed water system (75t).
Results	Unit 3	From 10:19 am – 11:57 am on June 17, water and hydrazine were injected by the fuel pool cooling and filtering system (49t).

- From May 31, cooling using the circulating cooling system for Spent Fuel Pool, Unit 2 is underway.
  Spent fuel pool water temperature at 11:00 am on June 17: 31℃
- From June 16, changing water feeding line from concrete pumping vehicle to alternative water injecting line, injecting fresh water to spent fuel pool of Unit 4 was started

<Water Injection to Reactor Pressure Vessels> (as at 11:00 am on June 17)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1	Injecting freshwater (approx. 4.5m^3/h)	114.2℃	98.6℃
2	Injecting freshwater (approx. 4.9m^3/h)	108.0℃	106.0℃
3	Injecting freshwater (approx. 11.2～11.3m^3/h)	150.7℃	140.6℃

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

<Injection of Nitrogen Gas to the Primary Containment Vessel of Unit 1 (PCV)>

◇Injection of nitrogen gas

- Primary Containment Vessel pressure: 156.3 (1:20am, April 7) → 134.5kPaabs, (11:00am, June 17) approx. 47,000m^3.

<Others>

- Since April 10, we have been clearing outdoor rubbles by a remote control to improve working environment.
- Since April 26, we are continuing to spray dust inhibitor in the site of the power station. (On June 16, old

administration office building, 6,600m2, on June 17, around ground etc).

- Since May 10, we commenced clearing of rubble in front of carry-in gate for large stuff of reactor building of Unit 3 by using robots.
- Since May 13, preparation work for installation of a cover for the reactor building of Unit 1.
- Since June 3, we have been carrying out restoration woks of port related facilities
- Since June 7, we have been installing support structure into the bottom of fuel spent pool of reactor building of Unit 4.
- From June 11, we started the work to improve inside working environment of Unit 2 Reactor Building.
  At 12:39 pm, we opened air-lock double doors of Reactor Building.
  From 12:42 pm we started to operate an ambient air filtration system.
- From approx. 10:00 am on June 13, we started operation of the circulating seawater purification facility.
- On June 15 decontamination commissioning was conducted at the inside of the truck bay door.

END