Plant Status of Fukushima Daiichi Nuclear Power Station

June 16, 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 June 16 the overall treatment facility will be commissioned and full operation will be started.

[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 16)

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.+4,981 mm (254 mm increase from 7:00 am, June 15) Accumulated total increase in water level: 6,198 mm [Miscellaneous Solid Waste Volume Reduction Treatment Building] Water level: O.P.+2,351 mm (13 mm increase from 7:00 am, June 15) Accumulated total increase in water level: 3,077 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 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 16)	

* 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 16)

	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 15	O.P. +4,920 mm No change from 7:00 am, June 15
Unit 2	O.P. +3,663 mm (337mm) 16 mm decrease since 7:00 am, June 15	O.P. +3,647 mm 17 mm decrease since 7:00 am, June 15
Unit 3	O.P. +3,822 mm (178 mm) 13 mm increase since 7:00 am, June 15	O.P. +3,799 mm 15mm decrease since 7:00 am, June 15
Unit 4	—	O.P. +3,803mm 12 mm decrease since 7:00 am, June 15

- Water level at Unit 1 Reactor Building: as of 7:00 am on June 16, O.P. +4,465mm, 65mm decrease since 7:00 am, June 15
- 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	6/15	9:30/13:20	ND/ND	0.70/0.57	0.41/0.38
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi	6/15	8:50/13:00	ND/ND	0.47/0.48	0.39/0.30
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	6/15	8:05	ND	0.20	0.13
Approx. 30km offshore of Iwasawa Seashore, Naraha Town*	6/15	6:50/6:55	ND	0.08/0.08	0.08/ND

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

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

- Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi), Approx. 3km from the offshore of Haramachi Ward, Minamisoma City, Approx. 3km from the offshore of Odaka Ward, Minamisoma City, Approx. 8km from the offshore of Odaka Ward, Minamisoma City, Approx. 8km from the offshore of Iwasawa, Naraha Town

<Water Injection and Spraying to Spent Fuel Pools>

Results	Unit 4	On June 16, no water injection or spray is implemented.
Plan	Unit 4	From 1:14 pm on June 16 Injected approx. 120 tons of freshwater and hydrazine by concrete pump vehicle

- 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 16: 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>

【Unit 1】Injecting freshwater (reactor feed water system: 4.5 m³/h):
<Feed-water nozzle> 114.0℃
<Bottom of reactor pressure vessel>98.3℃

【Unit 2】Injecting freshwater (reactor feed water system:5.0m³/h)
<Feed-water nozzle> 107.9℃
<Bottom of reactor pressure vessel> 106.9℃

【Unit 3】Injecting freshwater (reactor feed water system: 11.2-11.3 m³/h)
<Feed-water nozzle> 149.1℃
<Bottom of reactor pressure vessel> 151.2℃

【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) → 133.8kPaabs, (11:00am, June 16) approx. 46,300m³.

<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 15, around Main Gate etc, 7,000m^2, on June 16, around UHV Switching Station for Units 5 & 6 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