Plant Status of Fukushima Daiichi Nuclear Power Station

June 14, 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

- From June 4, radioactive accumulated water treatment system water flow test is underway
- From 3:45 am to 2:00 pm, on June 14: stand-alone commissioning of Cesium absorption Instruments (Kurion)
  [Future plan] Decontamination instruments (AREVA) stand-alone commissioning -> Unite commissioning -> Full treatment start-up
- From June 8, Big storage tanks for storage and treatment contaminated water are being transferred and installed sequentially.

◇Treatment status of accumulated radioactive water from trenches vertical shafts and basement level of each buildings

Unit	Draining water source -> place transferred	Status
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 ～)	Increase of water level of Process Main Building: 5,650 mm as of 7:00 am, June 14 (135 mm increase from 7:00 am, June 13)
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, from 10:05 am on June 14)	Increase of water level of Miscellaneous Solid Waste Volume Reduction Treatment Building: 3,052mm as of 7:00am, June 14 (12 mm increase from 7:00 am, June 13)
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, from 10:00 am to 4:00 pm on June 13, from 10:00am on June 14)	

◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, June 14)

	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 13	O.P. +4,920 mm No change from 7:00 am, June 13
Unit 2	O.P. +3,696 mm (304mm) 18 mm decrease since 7:00 am, June 13	O.P. +3,680 mm 14 mm decrease since 7:00 am, June 13
Unit 3	O.P. +3,845 mm (155 mm) 21 mm increase since 7:00 am, June 13	O.P. +3,832 mm 22mm increase since 7:00 am, June 13
Unit 4	—	O.P. +3,819mm 21 mm increase since 7:00 am, June 13

- Water level at Unit 1 Reactor Building: as of 7:00 am on June 14, O.P. +4,599mm, 110mm increase since 7:00 am, June 13
- With regard to Unit 2 and 3, blockage work to the extension of the pit and the pit whose flow path is unclear is underway.
  (Blockage work to the pit related to the outflow incident 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: 40Bq/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	6/13	10:20/14:15	ND/ND	0.35/ND	0.33/0.18
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi	6/13	9:25/14:00	ND/ND	0.40/0.57	0.28/0.39
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	6/13	9:20	ND	ND	ND
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	6/13	7:55	ND	ND	ND
Approx. 3km offshore of Iwasawa Seashore, Naraha Town	6/13	7:40/7:40	ND/ND	ND/ND	ND/ND
Approx. 3 km offshore of the northern part of Iwaki City※	6/13	6:00/6:00	ND/ND	ND/ND	ND/ND
Approx. 3 km offshore of Natsuigawa, Iwaki City※	6/13	5:40/5:40	ND/ND	0.08/ND	ND/ND
Approx. 3 km offshore of Onahama Port, Iwaki City※	6/13	5:45/5:45	ND/ND	ND/ND	ND/ND
Approx. 3 km offshore of Ena, Iwaki City※	6/13	6:00/6:00	ND/ND	ND/ND	ND/ND
Approx. 3 km offshore of Numanouchi, Iwaki City※	6/13	5:30/5:30	ND/ND	ND/ND	ND/ND

Approx. 3 km offshore of Toyoma, Iwaki City※	6/13	5:20/5:20	ND/ND	ND/ND	ND/ND
Approx. 3km offshore of Takadokobama Seashore, Ibaraki prefecture※	6/10	8:52/8:48	ND/ND	ND/ND	ND/ND
Approx. 3km offshore of Kujihama Seashore, Ibaraki prefecture※	6/11	9:08/9:04	ND/ND	ND/ND	ND/ND
Approx. 3km offshore of Oarai Seashore, Ibaraki prefecture※	6/11	12:37/12:41	ND/ND	ND/ND	ND/ND
Approx. 3km offshore of Hirai Seashore, Ibaraki prefecture※	6/10	10:20/10:24	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Hasaki Seashore, Ibaraki prefecture※	6/10	7:39/7:41	ND/ND	ND/ND	ND/ND
Approx. 8km offshore of Iwasawa, Naraha Town※	6/13	7:40/7:40	ND/ND	ND/ND	ND/ND
Approx. 15 km offshore of Hironomachi※	6/12	7:05/7:05	ND/ND	ND/ND	ND/ND

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

<Water Injection and Spraying to Spent Fuel Pools>

Results	Unit 3 Unit 4	10:09 am～11:48 am on June 13 Injected freshwater and hydrazine through Fuel Pool Cooling and Filtering System 4:36 pm～9:00 pm on June 13 Sprayed freshwater and hydrazine by a concrete pumping vehicle (150t)
Plan	Unit 4	From 4:10 pm on June 14 Spraying freshwater and hydrazine by a concrete pumping vehicle (150t)

- 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 14: 32℃

<Water Injection to Reactor Pressure Vessels>

【Unit 1】 Injecting freshwater (reactor feed water system: 5.2 m³/h):
At 11:00am, June 14, <Feed-water nozzle> 112.2℃
<Bottom of reactor pressure vessel>97.0℃

【Unit 2】 Injecting freshwater (reactor feed water system:5.0m³/h)
At 11:00am, June 14, <Feed-water nozzle> 108.1℃

【Unit 3】 Injecting freshwater (reactor feed water system: 11.2-11.3 m³/h)
At 11:00am, June 14, <Bottom of reactor pressure vessel> 160.8℃

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

- On June 14, in order to improve reliability, we replaced water injection lines to Reactors for Units 1 to 3.
  From 12:14 pm to 12:37 pm, we temporarily stopped water injection to Reactor, Unit 2.
  From 1:02 pm to 1:31 pm, we temporarily stopped water injection to Reactor, Unit 3.
  From 2:09 pm to 3:50 pm, we temporarily switched to firefighting pump for water injection to Reactor, Unit 1.

<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) → 132.3kPaabs, (11:00am, June 14) approx. 45,000m³.

<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 13, around Main Gate etc, 8,750m^2, on June 14, 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 10:00 am on June 13, we started operation of the circulating seawater purification facility.
- From 7:52 am to 9:47 am on June 14, we checked the status of rubbles around R/B of Unit 1 by T-Hawk in preparation for the installation of the cover for the R/B of Unit 1.

END