Plant Status of Fukushima Daiichi Nuclear Power Station

May 20th, 2011
Tokyo Electric Power Company

<Draining Water on Underground Floor of Turbine Building (T/B)>

Unit	Draining water source → place transferred	Status
Unit 2	Unit2 Vertical Shaft of Trench → Process Main Building of Central Radioactive Waste Treatment Facility (from 10:08 am, April 19)	Increase of water level of Process Main Building: 3,163 mm as of 7:00, May 20 (120 mm increase from 7:00, May 19)
Unit 3	Unit3 Turbine Building → Miscellaneous Solid Waste Volume Reduction Treatment Building of Central Radioactive Waste Treatment Facility (from 18:04 am, May 17)	Increase of water level of Miscellaneous Solid Waste Volume Reduction Treatment Building: 1,083 mm as of 7:00, May 20 (298 mm increase from 7:00, May 19)
Unit 6	Unit6 Turbine Building →temporary tanks (from May 1 on demand basis)	May 19: No work for transfer May 20: No schedule for transfer

◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, May 20th)

	Vertical Shaft of Trench （from top of grating to surface）	T/B
Unit 1	O.P. +1,020 mm（2,980 mm） No change since 7:00 am, May 19th	O.P. +5,050 mm No change since 7:00 am, May 19th
Unit 2	O.P. +3,230 mm (770 mm) 10 mm decrease since 7:00 am, May 19th	O.P. +3,230 mm No change since 7:00 am, May 19th
Unit 3	O.P. +3,350 mm (650 mm) 10 mm decrease since 7:00 am, May 19th	O.P. +3,330 mm 10 mm decrease since 7:00 am, May 19th
Unit 4	—	O.P. +3,450 mm No change since 7:00 am, May 19th

- Blockage work at the vertical shaft of trench has been implemented at Unit 2 and Unit 3.

<Monitoring of Radioactive Materials> * Samples in some points off shore could not be taken due to bad weather.

◇ 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: Everyday

Sampling Location (seacoast)	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	5/19	9:30/14:10	ND/0.38	2.2/1.8	1.2/1.3
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi.	5/19	8:50/13:50	ND/0.10	1.2/1.2	0.81/0.89
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	5/19	8:40	ND	0.52	0.36
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	5/19	7:55	ND	0.35	0.23
Approx. 3km from the offshore of northern part of Iwaki City*	5/19	4:55/4:55	ND/ND	0.30/ND	ND/ND
Approx. 3km from the offshore of Natsui River of Iwaki City*	5/19	5:25/5:25	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Onahama Port of Iwaki City*	5/19	6:10/6:10	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Ena of Iwaki City*	5/19	7:00/7:00	ND/ND	ND/0.08	ND/0.07
Approx. 3km from the offshore of Numanouchi of Iwaki City*	5/19	5:40/5:40	ND/ND	ND/ND	ND/ND
Approx. 3km from the offshore of Toyoma of Iwaki City*	5/19	6:00/6:00	ND/ND	ND/ND	ND/ND
Approx. 15km from the offshore of Fukushima Daiichi	5/19	8:30	ND	ND	ND
Approx. 15km from the offshore of Fukushima Daini	5/19	8:05	ND	ND	ND

* Left Number: Upper Layer, Right Number: Lower Layer

<Water Injection and Spraying to Spent Fuel Pools>

◇Result on May 19th

【Unit 4】From 16:30-19:30, we sprayed fresh water with the concrete pumping vehicle(approx.100 tons).

◇Plan on May 20th

【Unit 1】From 15:06, we started water spray of fresh water with the concrete pumping vehicle(planned approx. 90 tons).

◇ Others

- We are conducting detailed nuclide analyses on the water collected on April 12th from the spent fuel pool of Unit 4.
- We are conducting detailed nuclide analyses on the water collected on April 16th from the skimmer surge tank of Unit 2.

- We are conducting detailed nuclide analyses on the water collected on May 8th from the spent fuel pool of Unit 3.

<Water Injection to Reactor Pressure Vessels>

【Unit 1】Injecting fresh water (6.0 m³/h):
Reactor pressure vessel temperature:
At 11:00am, May 20th, <Feed-water nozzle> 109.1℃
<Bottom of reactor pressure vessel>93.2℃

【Unit 2】Injecting fresh water (7.0 m³/h)
Reactor pressure vessel temperature:
At 11:00am, May 20th, <Feed-water nozzle> 112.5℃

【Unit 3】Injecting fresh water (Fire Protection System 9.0 m³/h + Feed Water System 12.0 m³/h)
Reactor pressure vessel temperature:
At 11:00am, May 20th, <Bottom of reactor pressure vessel> 106.9℃

- Since 4.53 pm, May 12th, injection line has been changed from fire protection system to feed water system. (under monitoring the temperature)
- From 2:33 pm to 5:00pm, May 15th, boric acid was injected to the reactor (approx. 180kg).
- From 2:15 pm, May 20th, we changed the amount of water injected to the reactor pressure vessel by the feed water system from 9m³/h to 12m³/h.

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

【Units 5/6】Reactor cold shutdown. No particular changes on parameters.

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

◇Injection of nitrogen gas

- From 1:31 am, April 7th, we started to inject nitrogen gas to PCV using temporary nitrogen generators.
- At 1:20am, April 7th, the D/W pressure was 156.3 kPaabs and it has changed to 132.1 kPaabs, as of 11:00am, May 20th. The injected amount of nitrogen gas was approx. 28,400m³.

<Others>

- Since April 10th, we have been clearing outdoor rubbles by a remote control to improve working environment.
- Since April 26th, we have continued to spray the dust inhibitor. (On May 18th sprayed about 8,750m², on May 19th, sprayed around waste disposal area, observatory, etc. about 7,000 m²; continued).
- May 9th, we commenced preparation work for installing support structure into the bottom of fuel spent pool of reactor building of Unit 4.
- May 10th, commenced clearing of rubble in front of carry-in gate for large stuff of

reactor building of Unit 3 by using robots.

- May 12th, a reinforcement work of power source line of Unit 3 and 4
- May 13th, a preparation work for installation of a cover for the reactor building of Unit 1.
- At around 8:00am, May 17th, the Mega Float arrived at Onahama port. Leaving port to Fukushima Daiichi Nuclear Power Station was postponed on May 19th due to high waves.
- From 9:24am to 9:38am on May 18th, in order to improve working conditions at Unit 2, we conducted preliminary survey on the reactor building of Unit 2.
- From 4:30pm to 4:40pm on May 18th, in order to check the nitrogen gas injection to the Primary Containment Vessel of Unit 3, we conducted preliminary survey on the reactor building of Unit 3.
- May 19th, bags of zeolite (absorption materials) were put near the screen of Unit 1-4.
- TEPCO staffs went into the reactor building of Unit 1 to measure the water level and radiation level by γ camera.
- May 20th, we implemented improvement of environment for a part of 8 monitoring posts (No.8) installed at the boundary of station site, by decontamination of detector and installation of cover under the detector.
- May 20th, we will stand by an emergency diesel generator (6A) to switch the motor of seawater cooling pump for the existing emergency diesel generator for Unit 6.
- About 6:30 pm, May 20th, the Mega Float will leave from Onahama Port for Fukushima Daiichi site.

END