

Plant Status of Fukushima Daiichi Nuclear Power Station

May 19th, 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: 3,043 mm as of 7:00, May 19 (117 mm increase from 7:00, May 18)
Unit 3	Unit3 Turbine Building → Miscellaneous Solid Waste Volume Reduction Treatment Building of Central Radioactive Waste Treatment Facility (from 10:08 am, April 19)	Increase of water level of Miscellaneous Solid Waste Volume Reduction Treatment Building: 663 mm as of 7:00, May 19 (429 mm increase from 7:00, May 18)
Unit 6	Unit6 Turbine Building →temporary tanks (from May 1 on demand basis)	From 10:00 am to 2:00 pm on May 18: transferred approximately 80m3 On May 19: no schedule for transfer

◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, May 19th)

	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 18 th	O.P. +5,050 mm No change since 7:00 am, May 18 th
Unit 2	O.P. +3,240 mm (760 mm) No change since 7:00 am, May 18 th	O.P. +3,230 mm No change since 7:00 am, May 18 th
Unit 3	O.P. +3,360 mm (640 mm) No change since 7:00 am, May 18 th	O.P. +3,340 mm No change since 7:00 am, May 18 th
Unit 4	—	O.P. +3,450 mm No change since 7:00 am, May 18 th

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

<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: Everyday

Sampling Location (seacoast)	Date	Time	Ratio to Criteria (times)		
			Iodine-131	Cesium-134	Cesium-137
Approx. 30m north to Discharge Canal of Units 5 & 6 of Fukushima Daiichi	5/18	9:00/14:05	ND/ND	1.3/1.3	0.76/0.91

Sampling Location (seacoast)	Date	Time	Ratio to Criteria (times)		
			Iodine-131	Cesium-134	Cesium-137
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi.	5/18	8:40/13:45	0.28/ND	1.8/1.4	1.2/0.82
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	5/18	9:15	ND	0.45	0.28
Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi)	5/18	7:55	ND	0.35	0.23
Approx. 3km from the offshore of Haramachi Ward, Minamisoma City (upper layer)	5/18	10:25	ND	0.48	0.24
Approx. 3km from the offshore of Odaka Ward, Minamisoma City (upper layer)	5/18	10:40	ND	0.38	0.21
Approx. 3km from the offshore of Iwasawa, Naraha Town (upper layer)	5/18	9:45	ND	0.23	0.10
Approx. 3km from the offshore of Takadokobama shore, Ibaraki Prefec.*	5/18	8:48	ND	ND	ND
Approx. 3km from the offshore of Kujihama shore, Ibaraki Prefecture*	5/18	7:46	ND	ND	ND
Approx. 3km from the offshore of Oarai shore, Ibaraki Prefecture*	5/18	10:36	ND	ND	ND
Approx. 3km from the offshore of Hirai shore, Ibaraki Prefecture*	5/18	7:41	ND	ND	ND
Approx. 3km from the offshore of Hasaki shore, Ibaraki Prefecture*	5/18	8:47	ND	ND	ND
Approx. 8km from the offshore of Odaka Ward, Minamisoma City (upper layer)	5/18	11:00	ND	0.28	0.21
Approx. 8km from the offshore of Iwasawa, Naraha Town (upper layer)	5/18	9:20	ND	0.13	0.07
Approx. 15km from the offshore of Minamisoma City	5/18	9:50	ND	0.25	ND
Approx. 15km from the offshore of Ukedo River, Namie Town	5/18	9:25	ND	ND	ND
Approx. 15km from the offshore of Fukushima Daiichi	5/18	8:40	ND	0.28	ND
Approx. 15km from the offshore of Fukushima Daini	5/18	8:45	ND	0.23	ND
Approx. 15km from the offshore of Iwasawa Seashore, Naraha Town	5/18	8:10	ND	ND	ND
Approx. 15km from the offshore of Hirono Town	5/18	7:50	ND	0.23	ND

* Sampling frequency is once every few days.

<Water Injection and Spraying to Spent Fuel Pools>

◇Result on May 18th

[Unit 2] From 1:10 pm to 2:40 pm, we injected fresh water and hydrazine through Fuel Pool Cooling and Filtering System (approx. 53 tons).

◇ Plan on May 19th

【Unit 4】 We are spraying fresh water with the concrete pumping vehicle (approx. 100 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 19th, <Feed-water nozzle> 103.6°C

<Bottom of reactor pressure vessel> 90.1°C

【Unit 2】 Injecting fresh water (7.0 m³/h)

Reactor pressure vessel temperature:

At 11:00am, May 19th, <Feed-water nozzle> 112.9°C

【Unit 3】 Injecting fresh water (Fire Protection System 9.0 m³/h + Feed Water System 9.0 m³/h)

Reactor pressure vessel temperature:

At 11:00am, May 19th, <Bottom of reactor pressure vessel> 112.2°C

- 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).
- At around 10:11 am on May 17th, we changed the amount of water injected to the reactor pressure vessel by the feed water system from 6m³/h to 9m³/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 139.1 kPaabs, as of 11:00am, May 18th. The injected amount of nitrogen gas was approx. 27,800m³.

<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.

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