

Plant Status of Fukushima Daiichi Nuclear Power Station

April 27th, 2011
Tokyo Electric Power Company

<Draining Water from Underground Floor in Turbine Building (T/B)>

◇ Transference of water at Unit 2 to Centralized Radiation Waste Treatment Facility

- From 10:08 am, April 19th, transferring water from the vertical shaft of the trench of Unit 2 to the Centralized Radiation Waste Treatment Facility was started.(Increase in the water level at the Process Main Building: 946mm(as of 7:00am on April 27th))

◇ Water level at the vertical shaft of the trench and T/B (As of 7:00 am on April 27th)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
Unit 1	1,530mm (O.P. +2,470mm)	O.P. +5,050mm (150mm from the bottom)
Unit 2	890mm (O.P. +3,110mm)	O.P. +3,100mm (1,200mm from the bottom)
Unit 3	970mm (O.P. +3,030mm)	O.P. +3,000mm (1,100mm from the bottom)
Unit 4	—	O.P. +3,050mm (1,150mm from the bottom)

<Contaminated Water Leakage from Unit 2 to the sea>

- On April 6th, the stoppage of water leakage from beneath the supply cable pit was confirmed. Then we have enhanced additional stoppage of water leakage..

◇ Other measures

- From April 11th to April 14th, we installed the silt fences at the north side (the water intake canal) and the south side of breakwaters and in front of the screen of each Unit.
- From April 12th to April 15th, we installed iron plates in front of the screen of Unit 2.
- From April 15th to April 17th, we finished throwing in sandbags with radioactive-material adsorbent (zeolite) in front of the bar screens of Units 1 to 4.

* From now, we will also consider to install steel sheet piles and absorbents of radioactive materials, etc. to around the south breakwaters.

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

◇ Injection of nitrogen gas

- From 1:31am, April 7th, we started to inject nitrogen gas to PCV by temporary nitrogen generators.
- At 1:20am, April 7th, before we injected nitrogen gas, the D/W pressure was 156.3kPaabs and the pressure was changed to 153.7kPaabs, at 11:00am, April 27th. The amount of nitrogen gas injected was approx. 13,200m³.

<Monitoring of Radioactive Materials>

◇ Density of Iodine 131 in the seawater (Reference purpose)

Density limit by the announcement of Reactor Regulation: 0.04Bq/cm³

Sampling: Everyday

Sampling Location (seacoast)	Date	Time		Density (Bq/cm ³)		Ratio to Criteria (times)	
Approx. 30m north to Discharge Canal of Units 5 & 6 of Fukushima Daiichi	4/26	9:00	14:30	0.044	0.086	Approx.1.1	Approx.2.2
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi.	4/26	8:40	14:10	0.037	0.027	Approx.0.93	Approx.0.68
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	4/26	8:40		0.019		Approx.0.48	
Around Iwasawa Seashore (approx. 16km from Fukushima Daiichi)	4/26	8:05		0.029		Approx.0.73	

On April 26th, no sampling was conducted for 7 offshore locations due to bad weather.

Sampling Location (offshore)	Date	Time	Density (Bq/cm ³)	Ratio to Criteria (times)
Approx. 3km from the offshore of Haramachi Ward	4/25	9:35	Below detection level	-
Approx. 3km from the offshore of Odaka Ward	4/25	9:19	0.0090	Approx. 0.23
Approx. 3km from the offshore of Iwasawa	4/26	7:39	0.028	Approx. 0.70
Approx. 3km from the offshore of the north of Iwaki City	4/26	7:09	0.057	Approx. 1.4
Approx. 8km from the offshore of Odaka Ward	4/25	8:58	0.0091	Approx. 0.23

Approx. 8km from the offshore of Iwasawa	4/26	7:59	0.069	Approx. 1.7
Approx. 15km from the offshore of Minamisoma City	4/25	9:45	Below detection level	-
Approx. 15km from the offshore of Ukedo River	4/25	9:20	0.0049	Approx 0.12
Approx. 15km from the offshore of Fukushima Daiichi	4/25	8:50	0.014	Approx 0.35
Approx. 15km from the offshore of Fukushima Daini	4/26	8:05	0.028	Approx 0.70
Approx. 15km from the offshore of Iwasawa Seashore	4/26	7:40	Below detection level	-
Approx. 15km from the offshore of Hirono Town	4/26	7:10	0.020	Approx. 0.50
Approx. 3km from the offshore of Natsuigawa River	4/26	6:34	0.052	Approx. 1.3
Approx. 3km from the offshore of Onahama port	-	-	-	-

<Water Injection and Spraying to Spent Fuel Pools>

◇ Actual Results on April 26th

【Unit 3】12:25pm~2:02pm Fresh water injection by spent fuel pool cooling and filtering system (approx. 47.5t).

【Unit 4】4:50pm~8:35pm Spraying of fresh water by concrete pumping vehicle (approx. 130t).

◇ Schedule on April 27th

【Unit 4】 Spraying of fresh water by concrete pumping vehicle is under way.

◇ Others

- We are conducting detailed nuclide analysis on the water collected on April 12th from the spent fuel pool of Unit 4.
- We are conducting detailed nuclide analysis on the water collected on April 16th from the skimmer surge tank of Unit 2.
- From April 22nd, we started to examine the level of water and the dose of radiation, etc. of the spent fuel pool of Unit 4.

<Water Injection to Reactor Pressure Vessels>

【Unit 1】 Injecting fresh water:

Reactor pressure vessel temperature:

At 11:00am, April 27th, <Water feed nozzle> 130.0°C

<Bottom of reactor pressure vessel> 109.4°C

【Unit 2】 Injecting fresh water

Reactor pressure vessel temperature:

At 11:00am, April 27th, <Water feed nozzle> 120.3°C

【Unit 3】 Injecting fresh water

Reactor pressure vessel temperature:

At 11:00am, April 27th, <Bottom of reactor pressure vessel> 110.3°C

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

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

- On April 26th, we have confirmed the condition of north side of 1st floor in Unit1 reactor core building using remote control robot. No leak was confirmed.
- From 10:02am on April 27th, we started an operation to change the amount of water injected to Reactor core of Unit1 from approx. 6 m³/h to the maximum of approx. 14 m³/h gradually. The purpose of this is to examine the amount of water needed to flood fuel rods inside the reactor.

<Others>

- Since April 26th, we have started spraying the dust inhibitor in full swing (Sea side area of Unit1 turbine building at a total range of approx. 5,000m² on April 26th; East side of Unit3 turbine building at a total range of approx. 7,500m² is planned on April 27th).
- Since April 10th, we have been clearing outdoor rubbles by a remote control. (On April 27th, the work was conducted)
- By April 19th, we completed the construction work to strengthen the offsite power supply security between Unit 1 & 2 and Unit 3 & 4 (by setting up multiple power sources).
- Since April 26th, aiming to increase the power supply capacity in future as well as to strengthen the insulation, we have started the construction work to strengthen the offsite power security of Unit 3 & 4.
- From April 22nd, we commenced the construction work to strengthen the offsite power supply security between Unit 1 & 2 and Unit 5 & 6 (by setting up multiple power sources).

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