Plant Status of Fukushima Daiichi Nuclear Power Station

May 18th, 2011
Tokyo Electric Power Company

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

- From 10:08 am, April 19th, water has been transferred from the vertical shaft of the trench of Unit 2 to Central Radioactive Waste Treatment Facility:
  (Process Main Building: Increase of water level from the start: 2,812 mm (as of 7:00, May 17))
- From May 10th, installing a transferring line to the area of Unit 3 turbine building started. From 1:58 pm to 2:32 pm on May 17th, we checked for leaks.
- From May 1st, draining water of the basement of Unit 6 turbine building has been transferred to temporary tanks.
  (May 16th, approximately 80m³, May 17th 80m³, from 10:00 am to 2:00 pm on May 18th, transferred approximately 80m³).

◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, May 18th)

| | Vertical Shaft of Trench (from top of grating to surface) | T/B |
|---|---|---|
| Unit 1 | O.P. +1,020 mm (2,980 mm)<br>70mm decreased since 7:00 am, May 17th(*) | O.P. +5,050 mm<br>No change since 7:00 am, May 17th |
| Unit 2 | O.P. +3,240 mm (760 mm)<br>No change since 7:00 am, May 17th | O.P. +3,230 mm<br>No change since 7:00 am, May 17th |
| Unit 3 | O.P. +3,360 mm (640 mm)<br>10mm decreased since 7:00 am, May 17th | O.P. +3,340 mm<br>No change since 7:00 am, May 17th |
| Unit 4 | — | O.P. +3,450 mm<br>No change since 7:00 am, May 17th |

* In order to check for leaks regarding transferring water from the turbine building of Unit 3, we used water from the trench of Unit 1.

- 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-131：0.04Bq/cm3, Cs-134：0.06Bq/cm3, Cs-137： 0.09Bq/cm3

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 | 5/17 | 9:10/14:20 | 0.35/0.30 | 2.2/1.6 | 1.6/1.2 |

| | | | | | |
|---|---|---|---|---|---|
| Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi. | 5/17 | 8:45/14:00 | ND/ND | 0.88/0.72 | 0.59/0.40 |
| Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi) | 5/17 | 8:35 | ND | 0.32 | 0.20 |
| Around Iwasawa Seashore, Naraha Town (approx. 16km from Fukushima Daiichi) | 5/17 | 7:55 | ND | 0.43 | 0.30 |

*No off-shore data was taken due to a bad weather.

<Water Injection and Spraying to Spent Fuel Pools>

◇Result on May 17th

【Unit 4】 From 4:14 pm to 8:06 pm, we sprayed fresh water and hydrazine with the concrete pumping vehicle(approx. 120 tons).

◇Plan on May 18th

【Unit 2】 We are injecting fresh water and hydrazine through Fuel Pool Cooling and Filtering System from 1:00 pm(approx. 70 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 18th, <Feed-water nozzle> 96.5℃

<Bottom of reactor pressure vessel>85.4℃

At around 11:50 am on May 17th, we changed the amount of water injected to the reactor pressure vessel from 10m³/h to 6m³/h.

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

Reactor pressure vessel temperature:

At 11:00am, May 18th, <Feed-water nozzle> 113.0℃

【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 18th, <Bottom of reactor pressure vessel> 119.8℃

Since 4.35 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 130.7 kPaabs, as of 11:00am, May 18th. The injected amount of nitrogen gas was approx. 27,100m³.

<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 16th sprayed about 6,520m², on May 17th, sprayed around the baseball field, controlled industrial waste disposal area, 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 5:20am, May 15th, the “Mega Float” left from Yokohama port to Onahama port.
- At around 8:00am on May 17th, the Mega Float arrived at Onahama port.
- 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.
- At around 10:40am, in order to secure the room for the Mega Float, a barge set out from Fukushima Daiichi Nuclear Power Station to Fukushima Daini Nuclear Power Station. At around 1:20pm, the barge arrived at Fukushima Daini Nuclear Power Station.

END