Plant Status of Fukushima Daiichi Nuclear Power Station

April 28th, 2011
Tokyo Electric Power Company

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

◇ Transference of water of Unit 2 to Central Radioactive Waste Treatment Facility

- From 10:08 am, April 19th, transferring water from the vertical shaft of the trench of Unit 2 to Central Radioactive Waste Treatment Facility was started. (Water level increase at Process Main Building: 1,055 mm (as of 7:00 am on April 28th).

◇Water level at the vertical shaft of the trench and T/B (As of 7:00 am, April 28th)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
Unit 1	1,530 mm (O.P. +2,470 mm)	O.P. +5,050 mm (150 mm from the bottom)
Unit 2	900 mm (O.P. +3,100 mm)	O.P. +3,100 mm (1,200 mm from the bottom)
Unit 3	950 mm (O.P. +3,050 mm)	O.P. +3,050 mm (1,150 mm from the bottom)
Unit 4	－	O.P. +3,100 mm (1,200 mm 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.
- D/W pressure (4/7 1:20) 156.3kPaabs → (4/28 11:00) 120.1kPaabs approx. 13,900m^3.

<Monitoring of Radioactive Materials>

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

Density limit by the announcement of Reactor Regulation: 0.04Bq/cm^3

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	4/27	9:00	14:10	0.061	0.099	Approx.1.5	Approx. 2.5
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi.	4/27	8:40	13:50	0.016	0.020	Approx.0.40	Approx.0.50
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	4/27	8:40		0.013		Approx.0.33	
Around Iwasawa Seashore (approx. 16km from Fukushima Daiichi)	4/27	8:10		0.020		Approx.0.50	

Due to the bad weather condition sampling was not conducted, for 6 offshore points on April 26th and all the points on April 27th.

◇The density of Iodine 131 in the sub-drain (for reference)

Sampling interval: three times per week (Mon, Wed and Fri)

Sampling Location	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Deep Well
Sampling Date	4/27 10:20	4/27 10:10	4/27 10:00	4/27 11:56	4/27 10:50	4/27 10:40	4/27 8:39
Density (Bq/ cm^3)	55	390	28	0.049	0.041	0.31	Below detection level

<Water Injection and Spraying to Spent Fuel Pools>

◇Actual Results on April 27th

【Unit 4】From 12:18 to 14:01 and from 14:32 to 15:15, fresh water sprayed by concrete pumping vehicle. (approx. 85t)

◇Plan on April 28th

【Unit 2】10:15am～11:28am Injection of freshwater by Fuel Pool Cooling and Filtering (Clean up) System (approx. 43t).

◇ Others

- Detailed nuclide analysis on the water collected on April 12th from the spent fuel pool of Unit 4.
- Detailed nuclide analysis on the water collected on April 16th from the skimmer surge tank of Unit 2.
- From April 22nd, started examination of the level of water and the dose of radiation, etc. of the spent fuel pool of Unit 4.

<u><Water Injection to Reactor Pressure Vessels></u>

【Unit 1】 Injecting fresh water:
Reactor pressure vessel temperature:
At 11:00am, April 28th, <Feed-water nozzle> 106.6 ℃
<Bottom of reactor pressure vessel> 96.8 ℃

【Unit 2】 Injecting fresh water
Reactor pressure vessel temperature:
At 11:00am, April 28th, <Feed-water nozzle> 119.8 ℃

【Unit 3】 Injecting fresh water
Reactor pressure vessel temperature:
At 11:00am, April 28th, <Bottom of reactor pressure vessel> 109.4℃

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

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

- April 26th, no leakage was confirmed in the 1st floor of north area of Reactor Building by the remote robot survey.
- From 10:02, April 27th, water injection to Unit 1 reactor increased step by step from 6m3/h to maximum of 14 m3/h to examine appropriate water injection speed to fulfill the fuels in the reactor. Now water injected at 10 m3/h.

<u><Others></u>

- Since April 26th, we have started spraying the dust inhibitor in full swing (On April 30th, approx. 7,400 m2 were sprayed at the west side of shallow draft quay and the mountain-side of T/B of Unit 4; on May 1, approx. 5,400 m2 were sprayed at the west side of shallow draft quay and the south side of the reactor building of Unit 4)
- Since April 10th, we have been clearing outdoor rubbles by a remote control. (On April 28th, 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).

End