#### Plant Status of Fukushima Daiichi Nuclear Power Station

April 29<sup>th</sup>, 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.
- At 9:16 am, April 29<sup>th</sup>, in order to check the transferring facilities and enhance the investigating function, transferring was temporarily suspended (Increase in the water level at the Process Main Building: 1,182mm(as of 9:16 am on April 29<sup>th</sup>).

 $\diamondsuit$ Water level at the vertical shaft of the trench and T/B (As of 7:00 am on April 28<sup>th</sup>)

	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	900mm (O.P. +3,100mm)	O.P. +3,100mm (1,200mm from the bottom)
Unit 3	940mm (O.P. +3,060mm)	O.P. +3,000mm (1,100mm from the bottom)
Unit 4	_	O.P. +3,050mm (1,200mm from the bottom)

# <Contaminated Water Leakage from Unit 2 to the sea>

- On April 6<sup>th</sup>, 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 11<sup>th</sup> to April 14<sup>th</sup>, 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 12<sup>th</sup> to April 15<sup>th</sup>, we installed iron plates in front of the screen of Unit 2.
- From April 15<sup>th</sup> to April 17<sup>th</sup>, 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</p>(PCV)>

- ♦ Injection of nitrogen gas
- From 1:31am, April 7<sup>th</sup>, we started to inject nitrogen gas to PCV by temporary nitrogen generators.
- At 1:20am, April 7<sup>th</sup>, before we injected nitrogen gas, the D/W pressure was 156.3kPaabs and the pressure was changed to 114.3kPaabs, at 11:00am, April 29<sup>th</sup>. The amount of nitrogen gas injected was approx. 14,600m<sup>3</sup>.

#### <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/cm³)		Ratio to Criteria (times)	
Approx. 30m north to Discharge Canal of Units 5 & 6 of Fukushima Daiichi	4/28	9:30	14:40	0.064	0.041	Approx.1.6	Approx.1.0
Approx. 330m south to Discharge Canal of Units 1 to 4 of Fukushima Daiichi.	4/28	9:10	14:00	0.020	0.011	Approx.0.50	Approx.0.28
Around the north Discharge Canal of Fukushima Daini (10km from Fukushima Daiichi)	4/28	4/28 8:40		0.016		Approx.0.40	
Around Iwasawa Seashore (approx. 16km from Fukushima Daiichi)	4/28	8:10		0.021		Approx.0.53	

Due to bad weather, no sampling was conducted at 7 offshore locations on April  $26^{th}$  and at all offshore locations on April  $27^{th}$  and  $28^{th}$ .

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 <sup>3</sup> )	55	390	28	0.049	0.041	0.31	Below detection level

#### <u><Water Injection and Spraying to Spent Fuel Pools></u>

♦ Actual Results on April 28th

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

♦Plan on April 29th

Injection of freshwater is not planned.

#### $\Diamond$ Others

- We are conducting detailed nuclide analysis on the water collected on April 12<sup>th</sup> from the spent fuel pool of Unit 4.
- We are conducting detailed nuclide analysis on the water collected on April 16<sup>th</sup> from the skimmer surge tank of Unit 2.
- From April 22<sup>nd</sup>, 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 29th, <Water feed nozzle> 114.7°C

<Bottom of reactor pressure vessel> 95.0℃

[Unit 2] Injecting fresh water

Reactor pressure vessel temperature:

At 11:00am, April 29th, <Water feed nozzle> 119.2°C

[Unit 3] Injecting fresh water

Reactor pressure vessel temperature:

At 11:00am, April 29th, <Bottom of reactor pressure vessel> 112.9°C

[Unit 4] [Common spent fuel pool] No particular changes on parameters.

[Units 5/6] Reactor cold shutdown. No particular changes on parameters.

- At 10:14am on April 29<sup>th</sup>, we changed the amount of injecting freshwater to the reactor of Unit 1 from 10 m <sup>3</sup>/h to 6m <sup>3</sup>/h.
- From 11:36am to 2:05pm on April 29<sup>th</sup>, we have checked the status of the 1<sup>st</sup> floor of the reactor building of Unit 1 and confirmed that there was no significant water leakage from the primary containment vessel.

## <Others>

- Since April 26<sup>th</sup>, we have started spraying the dust inhibitor in full swing (Mountain side area of Unit 5 at a total range of approx. 4,540m<sup>2</sup> on April 28<sup>th</sup>; East side of Unit 4 turbine building and mountain side area of Unit 5 at a total range of approx. 11,000m<sup>2</sup> is planned on April 29<sup>th</sup>).
- Since April 10<sup>th</sup>, 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 26<sup>th</sup>, 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 22<sup>nd</sup>, 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