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

January 19, 2012 Tokyo Electric Power Company

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

- Status of highly concentrated accumulated radioactive water treatment facility and storage tank facility [Treatment Facility]
- •12:12 on January 16, 2012: we started the second cesium absorption apparatus. At 12:17 the flow rate reached steady state.
- Around 16:10 on January 17, we confirmed stop operation of Cesium adsorption apparatus due to instant voltage dip at Yonomori line No.1 and 2.
- •18:42 on January 17, 2012: We actuated Cesium adsorption apparatus. At 15:30 the flow rate reached steady state.

## [Storage Facility]

•June 8, 2011 ~: Large tanks to store and keep treated or contaminated water have been transferred and installed sequentially.

## ♦ Accumulated water in vertical shafts of trenches and at basement level of building

Unit	Draining water source→Place transferred	Status		
Unit 2	<ul> <li>Unit 2 T/B → Central Radioactive Waste Treatment Facility [Process Main Building] Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]</li> </ul>	Transferred from 14:57 on Jan. 15 to 14:10 on Jan. 17.		
Unit 3	<ul> <li>Unit 3 T/B → Central Radioactive Waste Treatment Facility</li> <li>[Process Main Building, Miscellaneous Solid Waste Volume Reduction</li> <li>Treatment Building (High Temperature Incinerator Building)]</li> </ul>	l Transterred from 1/1:/18 on Ian 15 to		
Unit 6	•Unit 6 T/B→Temporary tanks	No plan to transfer on Jan 19		

Transferring destination	Water level at transferring destination (as of 7:00 am on January 19)
Process Main Building	O.P.+4,436 mm (cumulative elevation of water level:5,653 mm), decrease 111mm from 7:00 am on January 18
Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)	O.P.+2,272 mm (cumulative elevation of water level:2,998 mm), decrease 572 mm from 7:00 am on January 18

## ♦ Water level of the vertical shaft of the trench, T/B and R/B(As of January 19 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm	O.P.+ 3,260 mm	O.P.+ 4,174 mm
	(No change since 7:00 on January	(14 mm increase since 7:00 on January	(9 mm inrease since 7:00 on January
	18)	18)	18)
Unit 2	O.P.+ 2,997 mm	O.P.+2,983 mm	O.P.+3,131 mm
	(75 mm increase since 7:00 on January	(70 mm increase since 7:00 on January	(68 mm increase since 7:00 on January
	18)	18)	18)
Unit 3	O.P.+ 3,085 mm	O.P.+3,040 mm	O.P.+ 3,319 mm
	(20mm increase since 7:00 on January	(24 mm increase since 7:00 on January	(28mm increase since 7:00 on January
	18)	18)	18)
Unit 4	_	O.P.+3,017 mm (12 mm increase since 7:00 on January 18)	O.P.+ 3,039 mm (14 mm increase since 7:00 on January 18)

## <Monitoring of Radioactive Materials>

#### Nuclide Analysis of Seawater (Reference)

Place of sampling	Date of	Time of	Ratio of density limit (times)		
Place of Sampling	sampling	sampling	I-131	Cs-134	Cs-137
Around 30 m north from discharge channel of 5-6U, 1F	January 18	8:45	ND	0.03	0.02
Around 330 m south from discharge channel of 1-4U, 1F	January 18	8:30	ND	0.02	ND
Around discharge channel of 3-4U, 2F	January 18	8:40	ND	0.02	0.01

<sup>•</sup>Others: Samples from 1 point along the shore of Fukushima (sampled on January 18) and 11 points at offshore of Fukushima (sampled on January 17) showed ND for all three major nuclides (lodine-131, Cs-134, 137).

# <Cooling of Spent Fuel Pools > (As of January 19 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	14.5 ℃
Unit 2	Circulating Cooling System	Under operation	13.2 ℃
Unit 3	Circulating Cooling System	Under operation	13.0 ℃
Unit 4	Circulating Cooling System	Under operation	22 ℃

<sup>[</sup>Unit 2] • A desalination equipment has been activated in order to reduce density of salt from the spent fuel pool since 11:50 on Jan 19, 2012.

[Unit 3] • A radioactive material removal equipment has been activated in order to remove radioactive materials from the spent fuel pool since 15:18 on Jan 14, 2012.

### < Water Injection to Pressure Containment Vessels > (As of January 19 at 11:00)

Unit	Status of water injection	Feed-water nozzle Temp.	Reactor pressure vessel Bottom temp.	Pressure of primary containment vessel
Unit 1	Injecting freshwater (Feed Water System: Approx.4.5 m³/h, Core Spray System: Approx.1.9 m³/h)	<b>26.5</b> ℃	<b>26.8</b> ℃	107.5 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.4.0 m³/h, Core Spray System: Approx.6.0 m³/h)	47.8°C	<b>50.7</b> ℃	109 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.4.0 m³/h, Core Spray System: Approx.5.0 m³/h)	<b>45.2</b> ℃	<b>53.6</b> °C	101.6 kPaabs

[Unit 2] 10:45 on January 19: As the pump for Reactor water injection was switched to the reactor injection pump on the hill, we adjusted water injection from the reactor feed water system from approx 2.8 m³/h to 4.0 m³/h, and water injection from the core spray system from approx. 7.0 m³/h to 6.0 m³/h.

[Unit 3] 9:43 on January 18: As the pump for Reactor water injection was switched to the reactor injection pump on the hill, we adjusted water injection from the reactor feed water system from approx 1.9 m³/h, and water injection from the core spray system from approx. 7.5 m³/h to 6.0 m³/h.

10:20 on January 19: As the pump for Reactor water injection was switched to the reactor injection pump on the hill, we adjusted water injection from the reactor feed water system from approx 3.0 m³/h to 4.0 m³/h, and water injection from the core spray system from approx. 6.0 m³/h to 5.0 m³/h.

### [Unit 4] [Unit 5] [Unit 6] ·No major change

#### <Others>

- October 7, 2011~: Continuously implementing water spray using water after purifying accumulated water of Unit 5 and Unit 6
  to prevent spontaneous fire of trimmed trees and diffusion of dust.
- January 11, 2012~: As finding accumulated water including radioactive materials (December 18, 2011) at the trench between
  Process Main Building of Central Radioactive Waste Treatment Facility and Miscellaneous Solid Waste
  Volume Reduction Treatment Building (High Temperature Incinerator Building), we started inspection of the
  other trenches in the site. \*Please refer to the other reference materials for the result of daily inspection.

January 18, 2012: We conducted sampling of gas at the Primary Containment Vessel gas administration system, Unit 2.
 As a result of the analysis, we confirmed that the density of Xenon 135 at the entrance of the system was below the detection limit (1.1x10<sup>-1</sup> Bq/cm<sup>3</sup>), below the recriticality determination threshold, 1 Bq/cm<sup>3</sup>.

End