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

December 30, 2011
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]

- •10:37 on December 27: We started 2<sup>nd</sup> cesium adsorption facility. At 10:43 am, we reached the regular flow rate. [Storage Facility]
- $\cdot$ 6/8 $\sim$  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 2T/B→Central Radioactive Waste Treatment Facility</li> <li>[Process Main Building,</li> <li>Miscellaneous Solid Waste Volume Reduction Treatment</li> <li>Building(High Temperature Incinerator Building)]</li> </ul>	•15:22 on December 28 - Transferring
Unit 3	<ul> <li>•Unit 3T/B→Central Radioactive Waste Treatment Facility</li> <li>[Process Main Building,</li> <li>Miscellaneous Solid Waste Volume Reduction Treatment</li> <li>Building(High Temperature Incinerator Building)]</li> </ul>	•14:37 on December 30 - Transferring
Unit 6	•Unit 6T/B→Temporary tanks	·12/30 No plan of transfer

Place transferred	transferred Status of Water Level (As of December 30 at 7:00)				
Process Main Building	Water level: O.P.+ 2,46 7 mm(Accumulated total increase:3,684 mm) 55mm increase since 7:00 on December 29				
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,055 mm(Accumulated total increase:3,781 mm) 309mm decrease since 7:00 on December 29				

(Other transfer) • At 9:42 on December 30, We conducted changing the translation pump as the accumulated water level in Unit 2 T/B not showed the tendency of decrease.

## ♦ Water level of the vertical shaft of the trench, T/B and R/B(As of December 30 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm	O.P.+ 2,881 mm	O.P.+ 4,247 mm
	(No change since 7:00 on	(23mm increase since 7:00 on	(1mm increase since 7:00 on
	December 29)	December 29)	December 29)
Unit 2	O.P.+ 3,184 mm	O.P.+ 3,161 mm	O.P.+ 3,291 mm
	(12mm increase since 7:00 on	(12mm increase since 7:00 on	(2mm decrease since 7:00 on
	December 29)	December 29)	December 29)
Unit 3	O.P.+ 3,178 mm	O.P.+ 3,147 mm	O.P.+ 3,402 mm
	(8mm increase since 7:00 on	(43mm increase since 7:00 on	(33mm increase since 7:00 on
	December 29)	December 29)	December 29)

٠	Unit 4	_	O.P.+ 3,130 mm (5mm increase since 7:00 on	O.P.+ 3,140 mm (7mm decrease since 7:00 on
			December 29)	December 29)

### <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
Approx. 30m North of Discharge Channel of 5,6U, 1F	12/29	8:35	ND	0.05	0.05
Approx. 330m North of Discharge Channel of 1-4U, 1F	12/29	8:10	ND	0.02	0.01

<sup>•</sup>Others: samples from 2 locations at the coast of Fukushima Daiichi Nuclear Power Plant (sampled on December 29), from 5 locations at offshore of Fukushima Prefecture (sampled on December 28) showed ND for all three major nuclides (lodine-131, Cs-134,137).

### <Cooling of Spent Fuel Pools >(As of December 30 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	12.5 ℃
Unit 2	Circulating Cooling System	Under operation	13.6 ℃
Unit 3	Circulating Cooling System	Under suspension	13.0 ℃*
Unit 4	Circulating Cooling System	Under operation	24 ℃

<sup>\*</sup>The temperature: was recorded as cooling under suspension, at 10:27 on December 30

[Unit 3] 12/30 10:27-13:42 in the alternative cooling system of the spent fuel pool of Unit 2, as the inhale pressure of the primary circulating pump showed the tendency of decrease, we conducted stopping the pump in order to conduct flushing of the strainer on its entry side and suspended cooling of the spent fuel pool (the temperature of the pool at the time of the suspension was approx. 13.0°C, the restart was approx. 13.1°C)

16:54 As there was often the tendency that absorbing pressure decreased until now and a sign of the strainer jamming may occur in future when we continue operating, until January 4,We decided to stop the cooling of the spent fuel pool temporarily and stopped this cooling system in consideration of a current pool water temperature degree being low enough with approximately 13 °C and radiation exposure by countercurrent work of the strainer.

And after December 31, we will operate the primary system of this system once a day due to confirm the spent fuel pool water temperature.

&Expected pool water temperature increase: approximately 5.0 $\sim$ 6.0  $^{\circ}$ C per day. [Unit 4]·11/29 $\sim$  We started operation of the ion exchange equipment to remove salt from spent fuel pool.

## <u>< Water Injection to Pressure Containment Vessels > (</u>As of December 30 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.4.4 m³/h,Core Spray System: Approx.2.0 m³/h)	27.6℃	28.2℃	106.5 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.2.0 m³/h, Core Spray System: Approx.7.0 m³/h)	54.4℃	57.0℃	108 kPaabs
Unit 3	Injecting freshwater	48.2℃	56.6°C	101.6 kPaabs

(Feed Water System: Approx.3.0 m <sup>3</sup> /h, Core		
Spray System: Approx.6.0 m <sup>3</sup> /h)		

[Unit 1] About atmosphere temperature in Primary Containment Vessel, we are watching a tendency of the 1 point (C point) that the temperature increase from December 22 and 2 points(D point and E point) that the temperature increase afterwards gently.

C point (Max) approximately  $54.6^{\circ}$ C(December 28 at 18:00)  $\rightarrow$  approximately  $47.7^{\circ}$ C(December 30 at 17:00)

D point (Max) approximately  $34.9^{\circ}$ C(December 28 at 21:00)  $\rightarrow$  approximately  $34.3^{\circ}$ C(December 30 at 17:00)

E point (Max) approximately 39.2°C(December 29 at 1:00)  $\rightarrow$  approximately 38.1°C(December 30 at 17:00)

[Unit  $1 \sim$ Unit 2]·12/30 9:44 As confirmed a change of the water injection rate to reactor, we adjusted as follows.

Unit 1:water injection rate from feed water system was adjusted from approx. 4.4 m3/h to 4.5 m3/h, from core spraying system was adjusted from approx. 1.8 m3/h to 2.0 m3/h.

Unit 2:: water injection rate from feed water system was adjusted from approx. 1.8 m3/h to 2.0 m3/h, from core spraying system was continued approx. 7.0 m3/h.

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

### <Others>

 $\cdot$ 10/7 $\sim$  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.

End