# Plant Status of Fukushima Daiichi Nuclear Power Station

October 19, 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]

- 6/17 20:00 Full operation started.

- 6/24 12:00 Treatment started at desalination facilities

- 6/27 16:20 Circulating injection cooling started.
- 8/7 16:11 Evaporative Concentration Facility has started full operation.
- 8/19 19:33 We activated second cesium adsorption facility (System B) and started the treatment of accumulated water by the parallel operation of cesium adsorption instrument and decontamination instrument. At 19:41, the flow rate achieved steady state.
- 10/18 At 6:09 am we suspended the Cesium adsorption apparatus unit No.1 due to power reinforcement works of the water desalinations. At 9:04 am for the same reason we suspended Unit No.2.
- 10/19 13:29 Since we completed the reinforce work for power source for water treatment facilities, we restarted the second cesium adsorption apparatus.
- 10/18 At approximately 11:00 am, while we were replacing the motor of the pumps (H2-2) in the skid of the suspended Cesium absorption apparatus, a puddle of water was found in the skid (depth approx. 15 cm, volume approx. 3 m3). We also found that the leakage already stopped when we found the puddle of water. After that, we interrupted the work of change of the motor and conducted draining the water by underwater pump. The cause is currently under investigation.

#### [Storage Facility]

From June 8, big 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 $\rightarrow$ Place transferred	Status
2u	$\cdot$ 2u T/B $\rightarrow$ Central Radioactive Waste Treatment Facility [Process Main Building]	·10/13 14:17 ~ 10/18 9:10 Transferred
3u	$\cdot$ 3u T/B $\rightarrow$ Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)	
6u	·6u T/B $\rightarrow$ temporary tanks ·temporary tanks $\rightarrow$ Mega Float	·10/19 No transferring planned ·10/19 10:00 ~ 16:00 Transferred

Transfer to:	Status of Water Level (As of October 19 at 7:00)	
Process Main Building	Water level: O.P.+ 2,611 mm(Accumulated total increase:3,828 mm)	
	19mm increase since 10/18, 7:00	
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,928 mm(Accumulated total increase:3,654 mm) 87mm increase since 10/18, 7:00	

• From 9:44 to 14:05 on October 19, we conducted the transferring from on-site banker building to Process Main Building

#### Water level at the vertical shaft of the trench and T/B (as of 10/19 7:00)

	Vertical Shaft of Trench	T/B	R/B
1u	O.P.< + 850 mm	O.P.+ 4,919 mm	O.P.+ 4,379 mm
	(No change since 10/18, 7:00)	(7mm decrease since 10/18, 7:00)	(18mm decrease since 10/18, 7:00)
2u	O.P.+ 3,033 mm	O.P.+ 3,056 mm	O.P.+ 3,130 mm
	(67mm decrease since 10/18, 7:00)	(62mm decrease since 10/18, 7:00)	(53mm decrease since 10/18, 7:00)

3u	O.P.+ 3,205 mm	O.P.+ 2,989 mm	O.P.+ 3,140 mm	
	(14mm decrease since 10/18, 7:00)	(79mm decrease since 10/18, 7:00)	(66mm decrease since 10/18, 7:00)	
4u		O.P.+ 2,999 mm	O.P.+ 3,034 mm	
	-	(36mm decrease since 10/18 7:00)	(22mm decrease since 10/18, 7:00)	

## <Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

\*Results of nuclide analysis of seawater, sampled on October 18 at 4 points around the Fukushima coastal area and 3 offshore points, are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

#### <Cooling of Spent Fuel Pools> (as of 10/19 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22	24.5
2u	Circulating Cooling System	Operating from 5/31 17:21	27.0
3u	Circulating Cooling System	Operating from 6/30 18:33	25.3
4u	Circulating Cooling System	Operating from 7/31 10:08	35

[Unit 4] 8/20~ We started operation of desalinating facility of the spent fuel pool.

### <u>Vater Injection to Pressure Containment Vessels></u> (as of 10/18 11:00)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel	Pressure of Primary Containment Vessel
1u	Injecting freshwater (Feed Water System: Approx. 3.6 m <sup>3</sup> /h)	70.4	72.5	121.6 kPaabs
2u	Injecting freshwater (Feed Water System: Approx. 3.5 m <sup>3</sup> /h, Core Spray System: Approx. 7.1m <sup>3</sup> /h)	75.4	81.2	119 kPaabs
3u	Injecting freshwater (Feed Water System: Approx. 2.1m³/h, Core Spray System: Approx. 8.0 m³/h)	70.1	72.5	101.5 kPaabs

[Unit 4] [Unit 5] [Unit 6] No particular changes in parameters.

#### <Others>

- 4/10 ~	Clearance of outdoor rubbles by remote control to improve working conditions.			
- 6/28 ~	Main construction work for installing the cover for the reactor building of Unit 1			
- 8/10 ~ 9/9	Implemented setting up iron framework of the cover for the reactor building of Unit 1			
- 9/10 ~ 10/14	Installment of wall panel for cover of reactor building of Unit 1			
- 10/15 ~	We are continuously implementing related work for installing a cover over Unit 1 Reactor Building.			
- 10/7 ~	We are spraying purified accumulated water at Unit 5 and 6 continually in order to prevent dust scattering and potential fire outbreaks from the cut down trees.			
- 10/18 17:55	Since we confirmed reduction of injection volume of nitrogen gas (approx. 11 m <sup>3</sup> /h) to the primary containment vessel of Unit 2, we adjusted the injection volume to approx.14 m <sup>3</sup> /h.			
- 10/19	We stopped seawater line pump of residual heat removal system (C) after stopped cooling			
	reactor by residual heat system (A) due to the downward trend on the flow rate and pressure			
	of the Unit 6 residual heat removal system. After that we restarted sea water pump of			
	residual heat removal system (C) and as we confirmed the related pump returned to running			
	at specified performance, we restarted cooling reactor by residual heat removing system (A)			
	at 3:02 pm on the same day. The temperature of the reactor water is rose 21.6 deg C to 22.1			
	deg C temporarily by this suspension.			