

## Plant Status of Fukushima Daiichi Nuclear Power Station

August 4, 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.
- 7/2 18:00 We completed installing buffer tanks and resumed circulating injection cooling via buffer tanks.
- 7/24 11:57 Water desalinations were shut-downed due to annunciator alarmed with relation to sand filtration system.  
19:19 Water desalinations were restarted by switching to spare equipment. Water injection into reactors of Unit 1 to 3 were continued without interruption by feeding water from filtrate tank to buffer tank.
- 7/31 10:50 a leakage was detected between water desalination facility and primary storage tank of concentrated water of water desalination equipment along the transfer line.  
11:15 we stopped the transferring pumps. At 11:20 am, we stopped the water desalination facilities. After that, we closed the valves of the transfer line, confirming that the leakage stopped at 0:30 pm.  
15:02 After replacing the line material and checking the status of leakage, we started the water desalination facility again.
- 8/1 17:00 Water injection and water flow test of Cesium adsorption Instruments No.2 (SARRY) started.
- 8/2 10:00 Commissioning of desalination facility (evaporation method) started.
- 8/4 5:32 Stopped Water Treatment Facility due to work of a bypass line installation to improve the treatment volume of accumulated water.

#### [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 (as of 8/4 7:00 am)

Unit	Draining water source → Place transferred	Status
2u	2u Vertical Shaft of Trench → Process Main Building, Central Radioactive Waste Treatment Facility (4/19 ~ 5/26, 6/4 ~ 6/8, 6/8 ~ 6/16, 6/22 ~ 6/27, 6/27 ~ 7/7, 7/13 ~ 7/15, 7/16 ~ 7/21, 7/22 ~ 7/29, 7/30 ~ 8/2, 8/4 7:09 ~ )	[Process Main Building] Water level: O.P.+5,249 mm 64 mm decrease from 8/3 7:00 am) (Accumulated total increase : 6,466 mm)
3u	3u T/B → Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building) of Central Radioactive Waste Treatment Facility (5/17 ~ 5/25, 6/18 ~ 6/20) 3u T/B → Process Main Building of Central Radioactive Waste Treatment Facility (6/14 ~ 6/16, 6/21 ~ 6/27, 6/27 ~ 6/28, 6/30 ~ 7/9, 7/10 ~ 7/15, 7/16 10:50 am ~ 7/21 15:59, 7/22 ~ 7/29, 7/30 16:13 ~ 8/4 7:17)	[Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)] Water level: O.P.+3,495 mm (48 mm increase from 8/3 7:00 am) (Accumulated total increase: 4,221mm)
6u	6u Turbine Building → temporary tanks 5/1 ~ 6/22, 6/30 ~ 7/9, 7/11, 7/21 ~ 24, 7/26 ~ 31, 8/2 as needed, 8/3 11:00 ~ 16:00 Temporary tanks Mega Float 6/30 ~ 7/5, 7/7 ~ 7/9, 7/11 ~ 16 and 7/27 ~ 28, 7/30 ~ 31 as needed, 8/2 as needed, 8/3 10:00 ~ 17:00	-

Water level at the vertical shaft of the trench and T/B (as of 7:00 am on August 4)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 8/3 7:00 am	O.P. +4,920mm, No change since 8/3 7:00 am
2u	O.P. +3,686mm (314mm), 51mm increase since 8/3 7:00 am	O.P. +3,696mm, 48mm increase since 8/3 7:00 am
3u	O.P. +3,736mm (264mm), 7mm decrease since 8/3 7:00 am	O.P. +3,572mm, 8mm decrease since 8/3 7:00 am
4u	-	O.P. +3,588mm, 8mm decrease since 8/3 7:00 am

- Water level at Unit 1 R/B: 8/4 7:00 am, O.P. +4,717 mm, 16mm decrease since 8/3 7:00 am.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Sampling Location	Date	Time	Ratio to Criteria (times)
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			Iodine-131	Cesium-134	Cesium-137
Around North Water Discharge Channel, 2F (approx. 10km from 1F)	8/3	8:25 am	ND	0.08	ND
Around Iwasawa Shore, 2F (approx. 16km from 1F)	8/3	7:55 am	ND	ND	0.05

\* Samples collected at 2 points along the coast of Fukushima Prefecture and 6 points off the coast of Fukushima Prefecture on August 3 were all below the detectable threshold.

#### <Cooling of Spent Fuel Pools>

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Fuel Pool Cooling and Filtering System	No water injection plan on 8/4	-
2u	Circulating Cooling System	Operating from 5/31 5:21 pm	34.0 (8/4 11:00)
3u	Circulating Cooling System	Operating from 6/30 6:33 pm	31.2 (8/4 11:00)
4u	Circulating Cooling System	Operating from 7/31 10:08 pm	41 (8/4 11:00)

·8/4 15:32 ~ We started replenishing water to the skimmer surge tank of Unit 4.

#### <Water Injection to Reactor Pressure Vessels> (at 11:00 am, 8/4)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel	Pressure of Primary Containment Vessel
1u	Injecting freshwater (approx. 3.8m <sup>3</sup> /h)	104.5	93.6	132.0kPaabs
2u	Injecting freshwater (approx. 3.5m <sup>3</sup> /h)	111.7	122.6	135kPaabs
3u	Injecting freshwater (approx. 9.1m <sup>3</sup> /h)	116.0	108.1	101.6kPaabs

[Units 4] [Unit 5] [Units 6] [Common spent fuel pool] No particular changes in parameters.

#### <Others>

- 4/10 ~ Clearance of outdoor rubbles by remote control to improve working conditions.
- 6/3 ~ Restoration works of port related facilities has been under operation.
- 7/12~ Construction work of installing steel pipe sheet pile against water leakage in the water intake channel.
- 6/28 ~ Main construction work for installing the cover for the reactor building of Unit 1
- 8/4 Conduct gas sampling inside of Unit 2 PCV
- 8/4 12:09 During a connection test of work to enhance instrument power, a diesel generator (5B) automatically started due to an error signal in relation to a water level of a reactor and we manually stopped it. There was no impact to electric power system.
- 8/4 around 12:50 Electricity went out in Main Anti-Earthquake Building.
- around 12:51 An emergency gas turbine generator started and power supply to Main Anti-Earthquake Building was restored. We are currently scrutinizing a cause of the electric power outage. There is no impact to plants due to the outage and we continue injecting water and nitrogen to reactors

END