

## Plant Status of Fukushima Daiichi Nuclear Power Station

August 7, 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.
- 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.
- 8/5 2:12 A process error alarm was generated and water treatment facility stopped.  
4:03 We confirmed that there were no problems with the facility and restarted it. It reached the rated flow at 4:21 am.
- 8/6 6:20 We stopped desalination facility, from approximately 8:30 am we made an inspection of level switch in the water tank of this facility.  
14:20 The inspection finished, at 14:30 we resumed desalination facility.
- 8/7 7:05 Pump has stopped as error alarm generated from one of four pumps of SMZ skid of Cesium Adsorption Facility. The operation of Water Treatment Facility has been continuing.  
8:07 Due to the pump trouble and occurrence of failure alarm, chemical injection pump of high speed coagulant facility of decontamination facility has stopped. Since backup pump was not started up, Water Treatment Facility has stopped.  
15:31 Water Treatment Facility was restarted to implement the adjustment of chemical injection pump.  
16:11 Evaporative Concentration Facility, which was additionally installed to Water Treatment Facility to produce fresh water from concentrated seawater generated at Water Desalination Facility, has started the operation.

#### [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 8/7 7:00 am)

Unit	Draining water source → Place transferred	Status
2u	2u Vertical Shaft of Trench → Central Radioactive Waste Treatment Facility [Process Main Building] (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.+5,183 mm 26 mm decrease from 8/6 7:00 am) (Accumulated total increase : 6,400 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 → Central Radioactive Waste Treatment Facility [Process Main Building] (6/14 ~ 6/16, 6/21 ~ 6/27, 6/27 ~ 6/28, 6/30 ~ 7/9, 7/10 ~ 7/15, 7/16 ~ 7/21, 7/22 ~ 7/29, 7/30 ~ 8/4, 8/5 8:42 ~ )	[Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)] Water level: O.P.+3,585 mm (27 mm increase from 8/6 7:00 am) (Accumulated total increase: 4,311mm)
6u	6u Turbine Building → temporary tanks 5/1 ~ 6/22, 6/30 ~ 7/9, 7/11, 7/21 ~ 24, 7/26 ~ 31, 8/2 ~ 8/3 as needed, 8/5, 8/6 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, 8/2 ~ 8/3 as needed, 8/5, 8/6 10:00 ~ 17:00	-

Water level at the vertical shaft of the trench and T/B (as of 8/7 7:00 am)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 8/6 7:00 am	O.P. +4,920mm, No change since 8/6 7:00 am
2u	O.P. +3,628mm (372mm), 22mm decrease since 8/6 7:00 am	O.P. +3,643mm, 19mm decrease since 8/6 7:00 am
3u	O.P. +3,747mm (252mm), 9mm decrease since 8/6 7:00 am	O.P. +3,587mm, 12mm decrease since 8/6 7:00 am
4u	-	O.P. +3,597mm, 9mm decrease since 8/6 7:00 am

- Water level at Unit 1 R/B: 8/7 7:00 am, O.P. +4,688 mm, 14mm decrease since 8/6 7:00 am.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

\* All the samples collected at 4 points along the coast of Fukushima Prefecture on August 6 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	Water injection from 8/5 3:20 pm to 5:51 pm	-
2u	Circulating Cooling System	Operating from 5/31 5:21 pm	35.0 (8/7 11:00)
3u	Circulating Cooling System	Operating from 6/30 6:33 pm	32.7 (8/7 11:00)
4u	Circulating Cooling System	Operating from 7/31 10:08 pm	42 (8/7 11:00)

- 8/7 15:56 ~ 16:27 We injected water to the spent fuel pool to replenish the skimmer surge tank of Unit 4.

<Water Injection to Reactor Pressure Vessels> (as of 8/7 11:00 am)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel	Pressure of Primary Containment Vessel
1u	Injecting freshwater (approx. 3.7m <sup>3</sup> /h)	104.6	93.9	131.6 kPaabs
2u	Injecting freshwater (approx. 3.7m <sup>3</sup> /h)	110.6	119.5	129 kPaabs
3u	Injecting freshwater (approx. 9.0m <sup>3</sup> /h)	115.5	106.8	101.5 kPaabs

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

- 8/7 7:19 We confirmed increase of water injection volume to Unit 3 reactor and adjusted it to approx. 9.0 m<sup>3</sup>/h.

<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 Although we conducted gas sampling inside of Unit 2 PCV, we stopped sampling due to the water accumulated in the pipes.
- 8/4 12:09 During a power connection test to enhance instrument power, a diesel generator (5B) automatically started due to an error signal related to the water level of reactors 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 because the underground distribution cable was damaged by boring work.
- around 12:51 An emergency gas turbine generator started and power supply to Main Anti-Earthquake Building was restored. There is no impact to plants due to the outage.

END