

Plant Status of Fukushima Daiichi Nuclear Power Station

September 16, 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.
- 9/12 10:06 Waste liquid discharge pump (B) in the suppression pool water surge-tank (SPT) stopped.
11:23 We started SPT waste liquid discharge pump (A). After that, we checked the soundness of SPT waste liquid discharge pump (B) and at 11:53 am, restarted SPT waste liquid discharge pump (B) and stopped SPT waste liquid discharge pump (A).
- 9/15 18:22 As we found that the density of radioactive materials is increasing after treatment by decontamination instruments, we stopped operating the decontamination instrument and the cesium adsorption instrument. At 6:42 pm we restarted to the cesium adsorption instrument only and it reached the rated flow at 6:46 pm.
- 9/16 10:54 Due to the malfunction of control boards of the second cesium adsorption instrument, it became impossible to check the flow rate or pressure, etc., and therefore we stopped the instrument manually. After that, we exchanged the control boards with the new ones and at 14:50 we restarted it. At 14:57, it reached the rated flow rate.

[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 → Place transferred	Status
2u	·2u Vertical Shaft of Trench → Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	·9/13 9:51 ~ Transferring
3u	·3u T/B Central Radioactive Waste Treatment Facility [Process Main Building]	·9/15 9:54 ~ Transferring
6u	·6u T/B → temporary tanks	·9/16 Not scheduled

Transfer to:	Status of Water Level (as of 7:00 on 9/16)
Process Main Building	Water level: O.P.+ 4,863mm (Accumulated total increase: 6,080mm) 71 mm decrease from 9/15 7:00
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,205mm (Accumulated total increase: 2,931mm) 16 mm increase from 9/15 7:00

Water level at the vertical shaft of the trench and T/B (as of 9/16 7:00)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 9/15 7:00	O.P. +4,920mm, No change since 9/15 7:00
2u	O.P. +2,796mm (1,204mm), 11mm decrease since 9/15 7:00	O.P. +2,851mm, 11mm decrease since 9/15 7:00
3u	O.P. +3,155mm (845mm), 18mm decrease since 9/15	O.P. +2,953mm, 17mm decrease since 9/15

	7:00	7:00
4u	-	O.P. +2,997mm, 17mm decrease since 9/15 7:00

- Water level at Unit 1 R/B: 9/16 7:00*, O.P. +4,757 mm, 146 mm increase since 9/15 7:00.
- Water level at Unit 3 R/B: 9/16 7:00, O.P. +3,024 mm, 11mm decrease since 9/15 7:00.
- 9/14 9:53 ~ 9/16 14:35 We transferred the accumulated water from the condenser of Unit 1 to the basement of T/B of Unit 1.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

*Results of nuclide analysis of seawater, sampled on September 15 at 4 points around the coastal area and 5 points offshore of Fukushima Pref. are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (as of 9/16 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22	30.5
2u	Circulating Cooling System	Operating from 5/31 17:21	34.0
3u	Circulating Cooling System	Operating from 6/30 18:33	32.9
4u	Circulating Cooling System	Operating from 7/31 10:08	41

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

[Common pool] 9/14 11:08- we stopped the operation of cooling facilities for common pool because the common pool power center will be moved with the replace of power panel located at the basement of the spent fuel common pool's building.

<Water Injection to Pressure Containment Vessels> (as of 9/16 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 (approx. 3.5m ³ /h)	90.4	85.4	124.7 kPaabs
2u	Injecting freshwater (Feed Water System: approx. 4.0m ³ /h CS System: approx. 2.0 m ³ /h)	105.9	113.6	117 kPaabs
3u	Injecting freshwater (Feed Water System: approx. 4.0m ³ /h CS System: approx. 3.0 m ³ /h)	107.0	103.4	101.5 kPaabs

[Unit 1] 9/16 15:41 We adjusted the amount of water injected into the reactor 3.5 m³/h to 3.8 m³/h.

[Unit 2]

9/16 9:11 We adjusted the amount of water injection to the reactor through core spray system from 1.8 m³/h to 2.0 m³/h.

15:35 We adjusted the amount of water injection to the reactor through core spray system from 2.0 m³/h to 3.0 m³/h.

[Unit 3]

9/16 10:16~14:15 We injected boric-acid solution in the reactor.

15:05 We adjusted the amount of water injection to the reactor through core spray system from 3.0 m³/h to 8.0 m³/h.

[Unit 4] [Unit 5] [Unit 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
- 8/10 ~ 9/9 Implemented setting up iron framework of the cover for the reactor building of Unit 1
- 9/10 Installment of wall panel for cover of reactor building of Unit1 started.

END