

Plant Status of Fukushima Daiichi Nuclear Power Station

October 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.
- 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.
- 10/4 11:38 Isolated circulating operation of the decontamination instrument has started in order to purify the water in the waste treatment water tank.*
*On September 15, an increase in the radioactivity concentration of the processed water was detected after the water was processed in the decontamination instrument. According to the investigation thereafter, the increase was estimated that it was caused by the influx of highly radioactive sludge water into the waste water treatment tank when the water in the primary despondence tank was drained to change the stirrer.
- 10/6 At around 9:58 am, we manually stopped the operation of Water Desalinations (hereafter RO) No2 and No3 because we found stain of leaked water in the water joint at the outlet piping of the Waster Desalinations' waste RO supply pump. Afterward we repaired the leaked point and restarted RO No2 and No3 at 1:01 pm.

[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 T/B* → Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)] *We changed discharge source from vertical shaft to T/B.	•10/6 13:48~ Transferring
3u	•3u T/B → Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	•9/30 10:00~ Transferring
6u	•6u T/B → temporary tanks	•10/7 10:00~16:00 Transferred

Transfer to:	Status of Water Level (as of 7:00 on 10/7)
Process Main Building	Water level: O.P.+ 3,478 mm (Accumulated total increase: 4,695 mm) 206 mm decrease from 10/6 7:00
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 2,251 mm (Accumulated total increase: 2,977 mm) 2 mm increase from 10/6 7:00

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

	Vertical Shaft of Trench	T/B	R/B
1u	O.P. <+850mm (No change since 10/6 7:00)	O.P. +4,952mm (2mm increase since 10/6 7:00)	O.P. +4,562mm (136mm increase since 10/6 7:00)
2u	O.P. +2,870mm (31mm increase since 10/6 7:00)	O.P. +2,915mm (28mm increase since 10/6 7:00)	O.P. +2,990mm (26mm increase since 10/6 7:00)
3u	O.P. +3,331mm (32mm increase since 10/6 7:00)	O.P. +3,137mm (30mm increase since 10/6 7:00)	O.P. +3,275mm (24mm increase since 10/6 7:00)
4u	-	O.P. +3,123mm (25mm increase since 10/6 7:00)	O.P. +3,144mm (30mm increase since 10/6 7:00)

[Unit 3] 10/3 10:59~ We started transferring the accumulated water from the condenser to the basement in the

turbine building.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

*Results of nuclide analysis of seawater, sampled on October 6 at 4 points around the Fukushima coastal area and sampled on October 4 and 5 at 5 points offshore, are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (as of 10/7 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22	23.5°C
2u	Circulating Cooling System	Operating from 5/31 17:21	27.0°C
3u	Circulating Cooling System	Operating from 6/30 18:33	25.3°C
4u	Circulating Cooling System	Operating from 7/31 10:08	33°C*

※The temperature of Unit 4 spent fuel pool is the data as of 7:00 due to suspension of monitoring camera for other work.

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

10/7, 10:32~12:32: we injected corrosion inhibitor (hydrazine) (approx. 2 m³)

<Water Injection to Pressure Containment Vessels> (as of 10/7 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. 3.8m ³ /h)	72.2°C	74.4°C	121.4 kPaabs
2u	Injecting freshwater (Feed Water System: approx. 3.7m ³ /h CS System: approx. 7.1 m ³ /h)	80.8°C	88.0°C	112 kPaabs
3u	Injecting freshwater (Feed Water System: approx. 2.2m ³ /h CS System: approx. 8.1 m ³ /h)	72.4°C	74.9°C	101.5 kPaabs

【Unit 2】 At 5:38 am on October 6, we adjusted the amount of water injected to the reactor through feed water system from approx. 3.4 m³/h to approx. 3.8 m³/h.

【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.
- 6/3~10/4 Implemented restoration works of port related facilities.
- 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~ Conducting installment of wall panel for cover of reactor building of Unit 1
- 10/6 Because we found increasing of the amount of nitrogen (approx. 17 m³/h) into primary containment vessel of Unit 2, we arranged the amount to approx. 13.5 m³/h at 12:30 am.
- 10/6 13:41~14:07 We temporarily stopped auxiliary sea water system pump of Unit 6 because declining trend of header pressure of the pump was found. We confirmed normal pressure after restart.
- 10/6 14:13~15:47 Conducting sampling of dusts at the upside of reactor building of Unit 3
- 10/7 11:44~14:03 Conducted dust sampling at the opening of indoor equipment hatch and within the truck bay door of Unit 1 reactor building
- 10/7 We stopped residual heat removal (RHR) system pump (A line), since we observed decreasing trend of flow rate of RHR removal system seawater pump (C) of Unit 6. After checking and confirming no errors in RHR system seawater pump (C) and RHR seawater system, we restarted cooling through RHR system (A line) at 12:41 pm.
- 10/7 14:06~15:50 We sprayed water at the site after having purified accumulated water at Unit 5 and 6 in order to prevent dust scattering and potential fire outbreaks from the cut down trees.

END