

Plant Status of Fukushima Daiichi Nuclear Power Station

August 12, 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.
- 8/7 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 full operation.
- 8/9 1:50 Due to the power source stoppage of Suppression Pool Water Surge-Tank (hereafter "SPT"), SPT Waste Liquid Pump and SPT Receiving Water Transfer Pump have stopped. An alarm showed low water level of Waste Liquid Reverse Osmosis Membrane Supply Tank.
- 6:57 Completed the reparation of SPT Receiving Tank's water level gauge.
- 9:35 Since Waste Liquid Reverse Osmosis Membrane Supply Tank' water level has restored, we resumed the operation of Water Desalinations.
- /8/11 12:25 Alarm was generated due to malfunction of a water level indicator in one of two lines of the decontamination instrument tank, and the water treatment facility was automatically stopped.
- 12:40 It was replaced by the other water level indicator, an the water treatment facility was started up. At 12:58, the flow reached to the rated flow.

[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 [Process Main Building]	· 8/10 16:47 ~ Transferring is in operation
3u	· 3u T/B → Central Radioactive Waste Treatment Facility [Process Main Building]	· 8/5 8:42 ~ Transferring is in operation
6u	· 6u Turbine Building → temporary tanks	· 8/11 10:00 ~ 16:00 Transferred
	· Temporary tanks → Mega Float	· 8/12 10:00 ~ 16:00 Transferred
		· 8/9 10:00 ~ Transferring is in operation (1)

Transfer to:	Status of Water Level (as of 7:00 on 8/10)
Process Main Building	Water level: O.P.+ 5,285mm (Accumulated total increase: 6,502mm) 1 mm increase from 8/11 7:00 am
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,560mm (Accumulated total increase: 4,286mm) 29 mm increase from 8/11 7:00 am

- (1) 8/9 10:00 Started the transferring of accumulated water from temporary tanks to Mega Float.
- Around 10:12 Since the leakage from transferring hose was confirmed, we stopped transferring.
- 13:35 We replaced the leaked part of transferring hose and resumed transferring.

Water level at the vertical shaft of the trench and T/B (as of 8/12 7:00 am)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 8/11 7:00 am	O.P. +4,920mm, No change since 8/11 7:00 am
2u	O.P. +3,587mm (413mm), 21mm decrease since 8/11 7:00 am	O.P. +3,605mm, 18mm decrease since 8/11 7:00 am
3u	O.P. +3,622mm (378mm), 9mm decrease since 8/11 7:00 am	O.P. +3,530mm, 12mm decrease since 8/11 7:00 am
4u	-	O.P. +3,539mm, 11mm decrease since 8/11 7:00 am

- Water level at Unit 1 R/B: 8/12 7:00 am, O.P. +4,619 mm, 5mm decrease since 8/11 7:00 am.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

The results of the samples collected at 4 seashore points and 5 points on August 10 are all N.D.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Sampling Location	Date	Time	Ratio to Criteria (times)		
			Iodine-131	Cesium-134	Cesium-137
Around Iwasawa shore, 2F (approx 16lm from 1F)	8/11	7:40	ND	0.11	ND

* All the samples collected at 3 points along the coast and 12 points offshore of Fukushima Prefecture on August 11, as well as 6 points off the coast of Miyagi Prefecture sampled on 8/9 and 5 points off the coast of Ibaraki Prefecture sampled on 8/9, 10 were all below the detectable threshold.

<Cooling of Spent Fuel Pools>

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22 am	39.5 (8/12 11:00)
2u	Circulating Cooling System	Operating from 5/31 5:21 pm	38.0 (8/12 11:00)
3u	Circulating Cooling System	Operating from 6/30 6:33 pm	33.6 (8/12 11:00)
4u	Circulating Cooling System	Operating from 7/31 10:08 pm	45 (8/12 11:00)

• From 12:12 pm to 2:07 pm on August 12, injected hydrazine to Spent Fuel Pool, Unit 4 via Circulating Cooling System (approx 2m³).

<Water Injection to Pressure Containment Vessels> (as of 8/12 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. 3.8m ³ /h)	103.2	93.7	130.8kPaabs
2u	Injecting freshwater (approx. 3.5m ³ /h)	109.5	117.0	127 kPaabs
3u	Injecting freshwater (approx. 9.0m ³ /h)	110.5	104.7	101.5 kPaabs

[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
- 8/10 Started setting up iron framework of the cover for the reactor building of Unit 1
- 8/11 approx. 11:20 Since a little water leakage in the primary hose of the circulating cooling equipment for the spent fuel pool in the centralized radiation waste treatment facility of Unit 4 was confirmed, the leakage part was covered and reinforced with plastic.
- 8/12 approx. 3:22 M 6.0 earthquake with the seismic center at offshore of Fukushima prefecture

occurred. Confirmed below:

- 3:42 The boiler for the vaporization and condensation system at the water treatment facility stopped. Restarted the boiler and resumed vaporization and condensation.
- 3:52 Reactor water injection rate for Unit 1 dropped to 3.2m³/h. Adjusted the rate to 3.9m³/h. Reactor water injection for Units 1 to 3 was continuous.
- 5:06 One out of two of the temporary control air compressor, Unit 1 stopped. As we could not restart this, at 6:44 am we started the back-up diesel-driven air compressor. There is no impact on the nitrogen gas injection for Unit 1.
- 5:27 We found very small volume of water leakage from a hose, primary system, alternative Spent Fuel Pool cooling system located in the rad waste treatment building, Unit 4 (different place from August 11). We are planning to replace the hose.

END