Plant Status of Fukushima Daiichi Nuclear Power Station

July 27, 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.
・7/21	8:38	Water treatment was interrupted due to power switching with relation to restoration work of Yonomori Line 2 circuits. The water treatment facility stopped after the power stopped at water level gauge installed at suppression pool water surge tank (B).
・7/22	0:28	Restarted water treatment facility. 0:40 Water treatment in operation
	7:10	Water treatment facility shut-downed by circuit breaker opening of spare transformer in the station due to overload.
	15:37	Restarted water treatment facility. 15:51 Water treatment in operation
7/23	8:45	Water treatment was interrupted due to power switching with relation to restoration work of Yonomori Line 2 circuits.
	15:26	Restarted water treatment facility. 16:27 Water treatment in operation
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.

[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 7/27 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 10:56 am～7/21 16:04, 7/22 16:56～)	[Process Main Building] Water level: O.P.+5,288 mm 77 mm increase from 7/26 7:00 am) (Accumulated total increase : 6,505 mm) [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)] Water level: O.P.+3,597 mm (79 mm decrease from 7/26 7:00 am) (Accumulated total increase: 4,323mm)
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 16:53～)	
6u	6u Turbine Building → temporary tanks 5/1～6/22, 6/30～7/9, 7/11 as needed, 7/21 11:00～7/22 18:00, 7/23 11:00～18:00, 7/24 11:00～16:00, 7/26 11:00～16:00 Temporary tanks →Mega Float 6/30～7/5, 7/7～7/9, 7/11～16 as needed and 7/27 10:00～10:45	

･7/27 10:45 We confirmed leakage from pumps which transfer accumulated water from temporary tanks to Mega-float and stopped the transfer.

12:30～14:00 We replaced transferring pumps.

◇Water level at the vertical shaft of the trench and T/B (as of 7:00 am on July 27)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 7/26 7:00 am	O.P. +4,920mm, No change since 7/26 7:00 am
2u	O.P. +3,587mm (413mm), 7mm decrease since 7/26 7:00 am	O.P. +3,600mm, 2mm decrease since 7/26 7:00 am
3u	O.P. +3,735mm (265mm), 6mm decrease since 7/26 7:00 am	O.P. +3,582mm, 8 mm decrease since 7/26 7:00 am
4u	—	O.P. +3,602mm, 13mm decrease since 7/26 7:00 am

・ Water level at Unit 1 R/B: 7/27 7:00 am, O.P. +4,797 mm, 67 mm decrease since 7/26 7:00 am.

<Monitoring of Radioactive Materials>

◇ Nuclide Analysis of Seawater (Reference)

* Samples collected at 4 points along the shores and 6 points of offshore on July 27 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 7/27	—
2u	Circulating Cooling System	Operating from 5/31 5:21 pm	34.0℃ (7/27 11:00)
3u	Circulating Cooling System	Operating from 6/30 6:33 pm	31.2℃ (7/27 11:00)
4u	Alternative Injection System	No water injection plan on 7/27	88～90℃ (7/26 16:00) *

* 7/26 11:15～12:52　Hydrazine was injected into the Spent Fuel Pool of Unit 2.

<Water Injection to Reactor Pressure Vessels> (at 11:00 am, 7/27)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.8m^3/h)	108.2℃	96.3℃
2u	Injecting freshwater (approx. 3.5m^3/h)	112.1℃	123.4℃
3u	Injecting freshwater (approx. 8.9m^3/h)	124.9℃	107.9℃

【Units 4】【Unit 5】【Units 6】【Common spent fuel pool】 No particular changes in parameters.

・ 7/24 11:10 amounts of water injection to Unit 1 was changed from 3.3m^3/h to approx. 3.8m^3/h.

<Injection of Nitrogen Gas into the Primary Containment Vessel> (at 11:00 am, 7/27)

Unit	Pressure of Primary Containment Vessel	Total volume of injected Nitrogen *1
1u	156.3kPaabs (4/7 1:20) →136.0kPaabs	Approx. 73,700m^3
2u	20kPaabs (6/28 19:00) →136kPaabs	Approx. 8,900m^3
3u	99.6kPaabs (7/14 17:00) →101.6kPaabs	Approx. 4,200m^3

<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.
・6/7～6/20	Installation of support structure into the bottom of spent fuel pool of reactor building of Unit 4.
・6/21～7/26	Concrete placement and preparation work.
・7/27～	Started installing forms for injecting grout
・6/28～	Main construction work for installing the cover for the reactor building of Unit 1
・7/26	Site inspection was conducted by a robot as to the 1st and 2nd floors of Reactor Building, Unit 3.
・7/27	Workers entered the reactor building of Unit 3 and surveyed water injection points and measured radiation dose.

END