Plant Status of Fukushima Daiichi Nuclear Power Station

July 30, 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 7/30 7:00 am)

Unit	Draining water source → Place transferred	Status
	2u Vertical Shaft of Trench → Process Main Building, Central	[Process Main Building]
0	Radioactive Waste Treatment Facility	Water level: O.P.+5,217 mm
2u	(4/19 ~ 5/26, 6/4 ~ 6/8, 6/8 ~ 6/16, 6/22 ~ 6/27, 6/27 ~ 7/7,	148 mm decrease from 7/29 7:00
	7/13 ~ 7/15, 7/16 ~ 7/21, 7/22 ~ 7/29, 7/30 16:10 ~)	am)
	3u T/B → Miscellaneous Solid Waste Volume Reduction	(Accumulated total increase :
	Treatment Building (High Temperature Incinerator Building) of	6,434 mm)
	Central Radioactive Waste Treatment Facility	
	(5/17 ~ 5/25, 6/18 ~ 6/20)	[Miscellaneous Solid Waste
	3u T/B → Process Main Building of Central Radioactive Waste	Volume Reduction Treatment
3u	Treatment Facility	Building (High Temperature
Ju	(6/14 ~ 6/16, 6/21 ~ 6/27, 6/27 ~ 6/28, 6/30 ~ 7/9, 7/10 ~	Incinerator Building)]
	7/15, 7/16 10:50 am ~ 7/21 15:59, 7/22 ~ 7/29, 7/30 16:13)	Water level: O.P.+3,640 mm
		(67 mm decrease from 7/29 7:00
		am)
		(Accumulated total increase:
		4,366mm)
	6u Turbine Building → temporary tanks	
	5/1 ~ 6/22, 6/30 ~ 7/9, 7/11, 7/21 ~ 24, 7/26 ~ 7/27 as needed,	
6u	7/28 11:00 ~ 16:00, 7/29 10:00 ~ 17:00, 7/30 11:00 ~ 16:00	_
Ju	Temporary tanks Mega Float	-
	6/30 ~ 7/5, 7/7 ~ 7/9, 7/11 ~ 16 and 7/27 as needed,	
	7/30 10:00 ~	

 $[\]cdot$ 7/30 11:04 \sim We transferred from spent fuel common pool to the water desalinations tank for water treatment facility.

Water level at the vertical shaft of the trench and T/B (as of 7:00 am on July 30)

	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since	O.P. +4,920mm, No change since 7/29 7:00 am
	7/29 7:00 am	
2u	O.P. +3,614mm (386mm), 50mm increase	O.P. +3,626mm, 46mm increase since 7/29 7:00 am
	since 7/29 7:00 am	
3u	O.P. +3,738mm (262mm), 19mm decrease	O.P. +3,595mm, 35mm increase since 7/29 7:00 am
	since 7/29 7:00 am	
4u	-	O.P. +3,589mm, 11mm increase since 7/29 7:00 am

Water level at Unit 1 R/B: 7/30 7:00 am, O.P. +4,714 mm, 1mm increase since 7/29 7:00 am.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Sampling Location		Time	Ratio to Criteria (times)		
Sampling Location	Date	Time	lodine-131	Cecium-134	Cecium-137
Approx. 30m north of Water Discharge Channel of 5-6u of 1F		10:15 am	ND	0.57	0.39
from 1F)					

^{*} Samples collected at 2 points along the shores of Fukushima Prefecture and 8 points offshore of Miyagi Prefecture on July 29 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 7/30	-
2u	Circulating Cooling System	Operating from 5/31 5:21 pm	34.0 (7/30 11:00)
3u	Circulating Cooling System	Operating from 6/30 6:33 pm	31.9 (7/30 11:00)
4u	Alternative Injection System	No water injection plan on 7/30	86 ~ 87 (7/29 16:00)*

^{* 7/30 11:12 ~ 12:57} Hydrazine was injected into the spent fuel pool of Unit 3.

<u><Water Injection to Reactor Pressure Vessels></u> (at 11:00 am, 7/30)

Unit	Status of injecting water	Temp. of	Bottom of reactor	Pressure of Primary
		feed-water nozzle	pressure vessel	Containment Vessel
1u	Injecting freshwater (approx. 3.4m³/h)	107.3	95.8	134.8kPaabs
2u	Injecting freshwater (approx. 3.2m³/h)	111.8	123.5	135kPaabs
3u	Injecting freshwater (approx. 8.9m³/h)	123.2	106.1	101.6kPaabs

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

^{* 7/30 13:16 ~ 14:47} Water was injected into the Reactor well and the Drier separator pit of Unit 4.

^{·7/30 11:57} Adjusted injection amount of water to Unit 1 from 3.4m³/h to 3.6m³/h and Unit 2 from 3.3m³/h to 3.6m³/h

<others></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.
·7/29	Implemented the gas sampling of Unit 1 Primary Containment Vessel.