Plant Status of Fukushima Daiichi Nuclear Power Station

June 24, 2011 Tokyo Electric Power Company

<Draining Water on Underground Floor of Turbine Building (T/B)>

Construction status of accumulated radioactive water treatment system and storage tank facility
 [Treatment Facility]

•6/17 20:00 \sim Full operation started.

 \cdot 6/23 0:43 \sim Passing water test started at water treatment facilities with high radiation water

13:00 Water treatment suspended for the flashing to change vessels

14:44 \sim Passing water test restarted at water treatment facilities with high radiation water

 \cdot 6/24 10:00 \sim Water treatment suspended for the flashing to change vessels

12:50 \sim Passing water test restarted at water treatment facilities with high radiation water

12:00 Water treatment started at water desalination facilities

[Storage Facility]

■ June 8, big tanks to store and to keep treated or contaminated water being transferred and installed sequentially

♦ Accumulated water in vertical shafts of trenches and at basement level of building (as of 6/24 7:00)

Unit	Draining water source → Place transferred	Status
1u	1u Condenser → CST (6/15 10:33 ~ 6/16 9:52)	[Process Main Building]
2u	2u Vertical Shaft of Trench → Process Main Building, Central Radioactive	Water level: O.P.+4,775 mm
	Waste Treatment Facility	(17mm decrease from 6/22 7:00)
	(4/19 10:08~5/26 16:01, 6/4 18:39~6/8 14:20, 6/8 18:03~6/16 8:40,	Accumulated total increase : 5,992mm
	6/22 9:56∼)	
	2u Vertical Shaft of Trench → 1u Condenser	[Miscellaneous Solid Waste Volume
	(6/17 14:20~14:59, 6/20 13:37~6/21 17:09)	Reduction Treatment Building]
3u	$3u \text{ T/B} \rightarrow \text{Miscellaneous Solid Waste Volume Reduction Treatment Building}$	Water level: O.P.+3,059mm
	of Central Radioactive Waste Treatment Facility	(17mm increase from 6/22 7:00)
	(5/17 18:04~5/25 9:10, 6/18 13:31~6/20 0:02)	Accumulated total increase:3,785 mm
	3u T/B → Process Main Building of Central Radioactive Waste Treatment	
	Facility	
	(6/14 10:05~6/16 8:46, 6/21 3:32~)	
6u	6u Turbine Building → temporary tanks	
	$(5/1\sim6/22 \text{ on demand basis})$	

♦ Water level at the vertical shaft of the trench and T/B (as of 6/24 7:00)

	,	,
	Vertical Shaft of Trench (from top of grating to surface)	T/B
1u	O.P. <+850mm (>3,150mm), No change since 6/23 7:00	O.P. +4,920 mm, No change since 6/23 7:00
2u	O.P. +3,721mm (279mm), 21mm decrease since 6/23 7:00	O.P. +3,710mm, 20mm decrease since 6/23 7:00
3u	O.P. +3,859mm (141mm), 9mm decrease since 6/23 7:00	O.P. +3,822mm 14mm decrease since 6/23 7:00
4u	_	O.P. +3,825mm, 13 mm decrease since 6/23 7:00

- Water level at Unit 1 R/B: 6/23 7:00, O.P. +4,491mm, 16mm increase since 6/21 7:00.
- Unit 2 and 3, blockage to the extension of the pit and the unidentified flow path is underway.
 (Blockage work of pits similar to outflow event or whose closure would ensure flow routes completed by 6/10)

<Monitoring of Radioactive Materials >

Nuclide Analysis of Seawater (Reference)

Density limit by the announcement of Reactor Regulation: I-131: 40Bq/L*, Cs-134: 60Bq/L, Cs-137: 90Bq/L

Sampling Location	Doto	Date Time	Ratio to Criteria (times)		
Sampling Location	Date		lodine-131	Cecium-134	Cecium-137
30m north of	6/23	9:10/13:50	ND/ND	0.27/0.32	0.20/0.19
5 ~ 6u Discharge Canal, Fukushima Daiichi	0/20	3.10/13.50	ND/ND	0.2170.02	0.20/0.10
330m south of	6/23	8:55/13:35	ND/ND	0.20/0.42	0.11/ND
1 ~ 4u Discharge Canal, Fukushima Daiichi	0/23	0.00/10.00	ND/ND	0.20/0.42	0.11/110
3km offshore of Natsuigawa, Iwaki City*	6/23	6:10/6:10	ND/ND	ND/0.27	ND/ND
3km offshore of Onahama port, Iwaki City*	6/23	6:00/6:00	ND/ND	0.09/ND	ND/ND
3km offshore of Toyoma, Iwaki City*	6/23	5:50/5:50	ND/ND	ND/0.22	ND/ND
15km offshore, Soma City*	6/23	10:20/10:20	ND/ND	0.23/ND	ND/ND

^{*} Figure in left: upper layer / right: lower layer

All the data of following 13 locations (22 points, collected as: offshore/upper layer, 15km offshore/ upper and lower Layer) were below the detectable limit;

Fukushima Daini North Discharge Canal (10km from Fukushima Daiichi), Iwasawa Seashore, Naraha Town (16km from Fukushima Daiichi), 3km, 8km Offshore of Kotaka area, Minami Soma City, 3km offshore Haramachi-ku, Minami Soma City, 3km, 8km, 15km offshore of Iwasawa Seashore, Naraha Town, 3km offshore of North of Iwaki City, 3km offshore of Ena, Iwaki City, 3km offshore of Numanouchi, Iwaki City, 15km offshore, Hirono Town

<Water Injection and Spraying to Spent Fuel Pools>

Results	-	- None on June 23
Plans		- None on June 24

⁻ 5/31 \sim , circulating cooling system for 2u Spent Fuel Pool in service. Pool water temperature 6/23 11:00: 33 $^\circ$ C

<Water Injection to Reactor Pressure Vessels> (as at 6/23 11:00)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.6m³/h)	118.7℃	102.8℃
2u	Injecting freshwater (approx. 3.5m³/h)	108.5℃	110.1℃
3u	Injecting freshwater (approx. 9.0~9.1m³/h)	151.1℃	121.9 ℃

 ^{6/23} Injecting amount into reactor changed (3u 10:17 ~ approx. 9.5 → approx. 9.0 m³/h)

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

<Injection of Nitrogen Gas to the Primary Containment Vessel of Unit 1>

Primary Containment Vessel pressure: 156.3 (4/7 1:20) → 137.9 kPaabs, (6/23 11:00) approx. 51,600m³.

<Others>

 \cdot 4/10 \sim Clearance of outdoor rubbles by a remote control to improve working conditions.

•4/26 \sim	Spraying dust inhibitor in the site of the power station. (6/22, around south seawall and 5u/6u		
	southeast yard approx.13,550m ² . 6/23, spraying west side of 4u R/B).		
•5/10 \sim	Clearing of rubble in front of carry-in gate for large stuff of reactor building of Unit 3 by robots.		
\cdot 5/13 \sim	Preparation work for installation of Reactor Building Cover of Unit 1.		
\cdot 6/3 \sim	Restoration woks of port related facilities carried out.		
·6/7~6/20	Installation of support structure into the bottom of fuel spent pool of reactor building of Unit 4.		
•6/21 \sim	Concrete filling and grout started.		
·6/19~6/23	Fresh water injection to reactor building well and instrument storage pool of Unit 4.		
•6/21	Investigation of measuring the radiation dose / dust density of reactor building of Unit 2.		
•6/22	Temporary Reactor Pressure Meter of Unit 2 installed.		
•6/23	Hoses in the nitrogen injection line of Reactor Containment Vessel of Unit 2 installed.		
•6/22 \sim	On-site survey for installing alternative cooling equipment of fuel pool cooling and filtering		
	system implemented.		
•6/24	Unmanned helicopter, collecting dust from opening mouth of reactor building of Unit 2		
	emergently landed on the top of the reactor building.		
•6/24	Commissioning test of Auxiliary Sea Water Pump (C) of Unit 5 started.		

 ${\sf END}$