

Plant Status of Fukushima Daiichi Nuclear Power Station

July 25, 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.
- 7/13 13:07 While conducting water treatment facility flashing in order to replace vessels, some leakage was found around the connection part at the liquid chemical injection line of coagulation setting devices (different location from the leakage points of July 10 and 12).
- 7/14 18:30 The repair for the leakage was completed. We restarted water treatment.
- 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 7/25 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.+5,171 mm 31 mm increase from 7/24 11:00 am) |
| 3u | 3u T/B → Miscellaneous Solid Waste Volume Reduction Treatment 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 ~) | (Accumulated total increase : 6,388 mm) [Miscellaneous Solid Waste Volume Reduction Treatment Building] Water level: O.P.+3,644 mm (22 mm increase from 7/24 11:00 am) (Accumulated total increase: 4,370mm) |
| 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 Temporary tanks Mega Float 6/30 ~ 7/5, 7/7 ~ 7/9, 7/11 ~ 16 as needed | |

Water level at the vertical shaft of the trench and T/B (as of 7:00 am on July 25)

| | Vertical Shaft of Trench (from top of grating to surface) | T/B |
|----|---|---|
| 1u | O.P. <+850mm (>3,150mm), No change since 7/24 11:00 am | O.P. +4,920mm, No change since 7/24 7:00 am |
| 2u | O.P. +3,589mm (411mm), 1mm increase since 7/24 11:00 am | O.P. +3,597mm, No change since 7/24 7:00 am |
| 3u | O.P. +3,746mm (254mm), 4mm decrease since 7/24 11:00 am | O.P. +3,600mm, 9mm decrease since 7/24 11:00 am |
| 4u | - | O.P. +3,616mm, 9mm decrease since 7/24 11:00 am |

- Water level at Unit 1 R/B: 7/25 7:00 am, O.P. +4,937mm, 64mm decrease since 7/24 11:00 am.

<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 | Date | Time | Ratio to Criteria (times) | | |
|---|------|---------|---------------------------|------------|------------|
| | | | Iodine-131 | Cesium-134 | Cesium-137 |
| Around North Water Discharge Channel, 2F (approx. 10km from 1F) | 7/24 | 8:15 am | ND | 0.10 | 0.06 |
| Around Iwasawa Shore, 2F (approx. 16km from 1F) | 7/24 | 7:50 am | ND | ND | 0.06 |

* 2 coastal points and 3 offshore points of which the samples were planned to be taken on July 24 were canceled due to bad weather.

<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 7/25 | - |
| 2u | Circulating Cooling System | Operating from 5/31 5:21 pm | 32.0 (7/25 11:00) |
| 3u | Circulating Cooling System | Operating from 6/30 6:33 pm | 30.1 (7/25 11:00) |
| 4u | Alternative Injection System | No water injection plan on 7/25 | 83 (7/20 15:30)* |

* Remote monitoring gauges to measure the temperature of unit 4 fuel spent pool was paused due to power source switching.(7/21-24)

7/25 12:29 ~ 13:27 Hydrazine was injected into the Spent Fuel Pool of Unit 2.

<Water Injection to Reactor Pressure Vessels> (at 11:00 am, 7/25)

| Unit | Status of injecting water | Temp. of feed-water nozzle | Bottom of reactor pressure vessel |
|------|---|----------------------------|-----------------------------------|
| 1u | Injecting freshwater (approx. 3.8m ³ /h) | 108.6 | 96.6 |
| 2u | Injecting freshwater (approx. 3.6m ³ /h) | 112.3 | 125.0 |
| 3u | Injecting freshwater (approx. 9.0m ³ /h) | 120.6 | 108.7 |

[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 3.3m³/h to approx. 3.8m³/h.

<Injection of Nitrogen Gas into the Primary Containment Vessel> (at 11:00 am, 7/25)

| Unit | Pressure of Primary Containment Vessel | Total volume of injected Nitrogen **1 |
|------|--|---------------------------------------|
| 1u | 156.3kPaabs (4/7 1:20) 136.2kPaabs | Approx. 72,400m ³ |
| 2u | 20kPaabs (6/28 19:00) 136kPaabs | Approx. 8,300m ³ |
| 3u | 99.6kPaabs (7/14 17:00) 101.6kPaabs | Approx. 3,600m 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~ Started construction for 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 ~ Concrete establishment and preparation underway.
- 6/28 ~ Main construction work for installing the cover for the reactor building of Unit 1 started.
- 7/22 Dust samplings were carried out to the upper part of reactor buildings of Unit 1 to 3 by remote helicopter (T-Hawk).

END