

Plant Status of Fukushima Daiichi Nuclear Power Station

May 1, 2012

Tokyo Electric Power Company

<1. Status of the Nuclear Reactor and the Primary Containment Vessel> (As of May 1 at 11:00 am)

Unit	Status of water injection		Reactor pressure vessel bottom temp.	Pressure of primary containment vessel ^{*1}	Hydrogen density of primary containment vessel
Unit 1	Injecting Fresh water	Core Spray System: Approx.2.0 m ³ /h	29.0 °C	107.4 kPa abs	A system:0.00 vol% B system:0.00 vol%
		Feed Water System: Approx.4.3 m ³ /h			
Unit 2	Injecting Fresh water	Core Spray System: Approx.5.8 m ³ /h	47.2 °C	17.08 kPa g	A system:0.54 vol% B system:0.53 vol%
		Feed Water System: Approx.2.9 m ³ /h			
Unit 3	Injecting Fresh water	Core Spray System: Approx.5.0 m ³ /h	58.6 °C	0.27 kPa g	A system:0.19 vol% B system:0.13 vol%
		Feed Water System: Approx.2.0 m ³ /h			

*1: absolute pressure (kPa abs) = gauge pressure (kPa g) + atmosphere pressure (normal atmosphere pressure 101.3 kPa).

<2. Status of the Spent Fuel Pool > (As of May 1 at 11:00 am)

Unit	Cooling type	Status of cooling	Temperature of water in Spent Fuel Pool
Unit 1	Circulating Cooling System	Under operation	20.0 °C
Unit 2	Circulating Cooling System	Under operation	21.9 °C
Unit 3	Circulating Cooling System	Under operation	20.7 °C
Unit 4	Circulating Cooling System	Under operation	29 °C

[Unit 3]-April 29, 11:13 am: An alarm which indicates an abnormality in the electrolyzer was triggered, and the desalting equipment was stopped automatically. Alternate cooling system of spent fuel pool continued operation, and cooling system had no impact. As a result of investigation at the site, water leakage was not confirmed.

April 29, 5:39 pm: Taking out the electrolyzer, we restarted the isolated operation of RO unit.

<3. Status of Water Transfer from the Basement Floor of the Turbine Building etc.>

Unit	Draining water source	Place transferred	Status
Unit 1	Unit 1 T/B	Unit 2 Turbine Building	4/27 2:49 pm - 4/29 9:05 am Transferred
Unit 2	Unit 2 T/B	Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	4/14 3:27 pm - 5/1 9:30 am Transferred
Unit 3	Unit 3 T/B	Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	4/29 9:43 Being transferred

<4. Status of the Treatment Facility and the Storage Facility > (As of May 1 at 7:00 am)

Facility	Cesium adsorption apparatus	Secondary Cesium adsorption apparatus (SARRY)	Decontamination instruments	Water desalinations (reverse osmosis membrane)	Water desalinations (evaporative concentration)
Operating status	Shutdown	Operation *	Shutdown	Operating intermittently according to the water balance	Operating intermittently according to the water balance

* Cleaning of filter is in progress.

- From June 8, 2011: Large tanks to store contaminated and decontaminated water are transported and installed.
- At 9:17 am on April 27, a worker of partner company found water leakage at water desalinations (RO) No2(When it was found, we estimated that the leaked water is 18 liters in total.) At 9:30 of the same day, we stopped the device. To prevent the leaked water to drop on the floor, we cured entry side of water joint of piping of the device, where the leakage occurred, with plastic bag. Then, we closed valves near leaked point, and confirmed no further leakage at 10:19 am of the same day. The amount of leaked water in total is 36 liters and all of them is pooled at the device, and so there is no leakage out side of the building. The radiation dose of dropped water is 7mSv/h, is about 1mSv/h. The sampling result of leaked water is I-131: Below Limit of Detection, Cs-134: 1.5×100Bq/cm3. Cs-137: 2.1×100Bq/cm3, All : 4.9×101Bq/cm3, All : 5.4×104Bq/cm3. As there are enough treated water, and also other water desalinations are in operation, there is no influence for injecting water to reactors.
- At 10:17 am on April 29, We isolated the water leak area and inspected other areas similar to this area. Since no problem was found as a result, we restarted the desalination unit (Reverse osmosis membrane method) 2 while isolating the skid (including the water leak area).
- At around 4:20 pm on April 29, A TEPCO employee on patrol found a water leak from the vent line above the evaporative concentration waste storage tank in the concentrated water storage area of the desalination unit. The water was continuously dripping (a single drop being equivalent to the length of a pencil lead) and the affected area was about 2mx2m with the ground (gravel) being wet. It has been confirmed that the water has not flown into the drainage connected to the ocean. In order to prevent further water leak, we have placed a container below the tank and removed some water by onnecting a hose with the vent line. The water leak stopped at about 7:10 pm on the same day. Upon our easurement, the dose rate of the wet ground surface was 2mSv/h (γ ray) / 0mSv/h (β ray). The dose rate measured on the urface of the accumulated water in the container was 1mSv/h (γ ray) / 0mSv/h (β ray), which was about the same as the ambient dose rate of the surrounding area. The measurement results of the leaked water are as follows. Iodine-131: Below than the measurable limit (2.1×100 Bq/cm3), Cesium-134: 2.9×101Bq/cm3, Cesium-137: 4.2×101Bq/cm3, All β: 3.9×103Bq/cm3. We will continue our investigation on the leaked water, keeping in mind the possibility that the water being the evaporative concentration waste fluid in the tank.

<5. Others>

- October 7, 2011~: Continuously implementing water spray using water after purifying accumulated water of Unit 5 and Unit 6 to prevent spontaneous fire of trimmed trees and diffusion of dust.
- February 23, 2012~: Test of drawing water in the Unit 6 sub drain to the temporary tank through the temporarily storage tank was implemented.
- March 6, 2012~: Test of drawing water in the Unit 5 sub drain to the temporary tank through the temporarily storage tank was implemented.
- March 14, 2012~: In order to prevent the diffusion of ocean soil, we started the full-scale covering work of seafloor by solidification soil (covering material).
- April 18, 2012~April 29 2012: Works for blocking of the discharge valve pit of Unit 2 circulating water pump and the Unit 2 power source cable trench were started.
- April 25, 2012~: For the purpose of preventing further contamination to the ocean through grounder water, we started a full-scale construction of water shielding wall.
- May 1, 2012~: A part of the Seismic-isolated Essential Buildings will start operating as an uncontrolled area.

END