

Plant Status of Fukushima Daiichi Nuclear Power Station

March 19, 2012
Tokyo Electric Power Company

<1. Status of the Nuclear Reactor and the Primary Containment Vessel> (As of March 19 at 11:00 am)

Unit	Status of Water injection		Bottom temp. of Reactor pressure vessel	Pressure of primary containment vessel*	Hydrogen density of Primary containment vessel
Unit 1	Injecting Fresh water	Core Spray System: Approx.1.6 m ³ /h	23.7 °C	106.1 kPaabs	A system: 0.00 vol% B system: - vol%
		Feed Water System: Approx.4.7 m ³ /h			
Unit 2	Injecting Fresh water	Core Spray System: Approx.6.0 m ³ /h	43.2 °C	18.78 kPag	A system: 0.12 vol% B system: - vol%
		Feed Water System: Approx.2.9 m ³ /h			
Unit 3	Injecting Fresh water	Core Spray System: Approx.4.9 m ³ /h	53.6 °C	0.31 kPag	A system: 0.19 vol% B system: -vol%
		Feed Water System: Approx.1.9 m ³ /h			

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

No data was measured at 11:00am on March 19 due to the suspension of power supply

[Unit 1]- At 8:52pm on March 16, regarding the atmospheric temperature in the reactor containment vessel, some of the thermometers show a rising tendency and thus we changed the amount of nitrogen injection into the reactor containment vessel from approx. 18m³/h to approx. 23m³/h.

[Unit 2]- At 9:45am on March 19, as we observed a variation in the amount of water injection into the reactor, we changed the amount of water injection from approx. 2.5m³/h to approx. 3.0m³/h for the feed water system. (The injection amount to core spray system is still approx. 6.0 m³/h)

- At 10:33am on March 19, to prepare for the inspection inside the PCV, we reduced the flow of nitrogen gas to PCV from approx. 10m³/h to approx. 5m³/h. (no flow changes of nitrogen gas to RPV)

[Unit 3]- At 9:53am on March 17, as we observed a variation in the amount of water injection into the reactor, we changed the amount of water injection from approx. 1.8m³/h to approx. 2.0m³/h for the feed water system, and from approx. 5.6m³/h to approx. 5.0m³/h for the core spray system.

2. Status of the Spent Fuel Pool> (As of March 19 at 11:00 am)

Unit	Cooling type	Status of cooling	Temperature of water in Spent Fuel Pool
Unit 1	Circulating Cooling System	Under operation*	28.0 °C
Unit 2	Circulating Cooling System	Under operation	17.5 °C
Unit 3	Circulating Cooling System	Out of service	14.6 °C
Unit 4	Circulating Cooling System	Out of service	28 °C

* System secondary air fin cooler: out of service

[Unit 2]

- Desalination equipment has been activated in order to reduce density of salt from the spent fuel pool since 11:50 am on January 19.
- From 1:24pm to 3:06pm on March 19, we conducted the injection of hydrazine to spent fuel pool.

[Unit 3]

- At 9:38am on March 18, the cooling system of the spent fuel pool was temporarily suspended in order to implement the disassemble inspection of valve in the primary coolant system. We will stop the system until March 21. The temperature of the pool is expected to increase approx 20 during the stoppage. (Temperature of the pool at the time of the operation stoppage: approx. 15.0).

<3. Status of water transfer from the basement floor of the Turbine Building etc.>

Unit	Draining water source →	Place transferred	Status
Unit 2	Unit 2 T/B →	Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	From 8:47am on March 11 to 9:37 am on March 18: Transferred
	Unit 2 T/B →	Central Radioactive Waste Treatment Facility [Process Main Building]	From 10:13am on March 18: Transferring
Unit 3	Unit 3 T/B →	Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	From 8:46am on March 15 to 10:00am on March 18: Transferred From 8:41am on March 19: Transferring

- From 8:27am to 4:23pm on March 19, at Central Radioactive Waste Treatment Facility, accumulated water was transferred from On-site Bunker Building to Process Main Building

<4. Status of the Treatment Facility and the Storage Facility> (As of March 19 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	In service	In service	Out of service	Operating intermittently according to the water balance	Operating intermittently according to the water balance

- from June 8, 2011 Large tanks to store contaminated and decontaminated water are transported and installed.

<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~: we have been conducting the transfer test of sub-drain Water of Unit 5 to the temporary tank via the interim storage tank.
- 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).
- March 19, 2012: In order to stop the offset power and change the station power supply with starting to operate the south switching station, at 5:12 am we stopped the operation of reactor monitoring indicator of Unit 3 (the temperature of reactor pressure vessel)* and the cooling operation of spent fuel pool in Unit 4. At 5:33 am, we stopped the cooling operation of common spent fuel pool. Regarding spent fuel pool of Unit 4, temperature of water in spent fuel pool when we stopped is approx. 28 °C and expected temperature increase rate is approx. 0.55 °C/h. Regarding common spent fuel pool, temperature of water is 21.3 °C and expected temperature increase rate is approx. 0.23 °C/h. The period of suspension of cooling is approx. 14 hours, but regarding the temperature of pool water there is no problem on cooling.

*: During the suspension of operating power supply, it is not content with Article 138 and 143(limiting condition for operation) in Safety Regulation. Therefore, we apply the Article 136 (exemption of limiting condition for operation in order to conduct maintenance work). Using temporary generator, we can monitor the temperature.(At 5:56 am on March 19, temporary generator started to supply power.)

END