Seismic Damage Information (the 476th Release)
(As of 14:00 August 9, 2012)

The Nuclear and Industrial Safety Agency (NISA) confirmed the current situation of Fukushima Dai-ichi Nuclear Power Station (NPS), Tokyo Electric Power Co., Inc. (TEPCO) as follows:

Major updates are as follows:

1. Nuclear Power Stations (NPSs)
   - Fukushima Dai-ichi NPS (TEPCO)
     - Accumulated water in the basement of the turbine building in Unit 2 was transferred to the basement of the turbine building in Unit 3 (from 18:10, August 8).
     - Accumulated water in the basement of the turbine building in Unit 3 was transferred to the miscellaneous solid waste reduction facilities (from 10:10, August 9).
     - An alarm went off to signal an abnormality of the Unit 4 spent fuel pool alternative cooling system, and the system was automatically shut down (at 6:24, June 30). In the site confirmation, it was identified that the alarm signs were displayed for “malfunction of UPS (uninterrupted power-supply system)”, “UPS bypass power feeding”, “Heat exchange unit A trip”, and “Heat exchange unit B trip”. As a result of investigating the UPS, the UPS alone seemingly had a malfunction. As an emergency measure, the bypass work for the main body of the UPS was conducted so that the power feeding could be provided from bypassing the UPS main body (from 13:36 to 14:45, July 1). Later, the spent fuel pool alternative cooling system was activated and restarted cooling (at 15:07 on the same day).
   - The UPS was detached to inspect the cause of the break down, and the spent fuel pool cooling was suspended (from 11:58 to 13:15, July 5). The detached UPS was checked and confirmed there was singe-like soot in the inside of the device. Therefore, the (publicly-run) Fire Department was called (at 17:20 on the same day), and the site-investigation was conducted by the Fire Department, judging that this was “not a fire” (at 10:35, July 6).
Since the installation environment of the control panel mounting the UPS was improved, the spent fuel pool alternative cooling system was suspended, the UPS replacement work was completed, and the control power system was recovered to the normal state (from 6:51 to 10:23, August 9). (SFP water temperature was 36 degrees Celsius at around the cold shut-down, the same as before.)

- Oil leakage was identified around a diesel generator of the suspended nitrogen supply device (high-ground nitrogen gas isolation device) (at around 18:20, July 20), which was reported to the public fire station (at 18:35 on the same day). It was confirmed that the oil had leaked from the main body of the diesel generator of the device, and the range of the leakage was 2m x 1m x 1mm (at 19:12 on the same day). It was judged that Limit of Operation was unable to be satisfied under the Operational Safety Program of Nuclear Facilities since the device may be inoperable (at 19:14 on the same day). Two leakage points in the rubber hose near the main body of the generator were repaired using tape (at 19:34 on the same day), and the leakage at these points was confirmed to be stopped (at 19:36 on the same day). The leaked oil was fuel (light oil) and the leakage amount was estimated approximately 20 liters. The public fire station confirmed that the oil leakage stopped (at 21:00 on the same day). Later, a backup diesel generator was connected to the device, operation was confirmed, and it was confirmed there was no abnormality (at 1:48, July 21). With this operation, it was judged that Limit of Operation was satisfied (at 2:29 on the same day).

Due to the replacement work from the backup diesel generator to a normal small diesel generator, the operational state was transferred to the state out of Limit of Operation on the Operational Safety Program of Nuclear Facilities, as planned (from 10:00 to 11:49, August 9).

In addition, since the nitrogen gas isolation device A is being suspended at present, the operation of the treatment water buffer tank bubbling nitrogen gas supply device has started, and the parallel operation with nitrogen gas isolation device B is being implemented for a while (at 9:25 on the same day).

For more information: NISA English Home Page