Seismic Damage Information (the 363rd Release)
(As of 14:00 February 27 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 1 was transferred to the basement of the turbine building in Unit 2 (from 10:20, February 25 to 9:44, February 26).
     - Accumulated water in the basement of the turbine building in Unit 2 was transferred to the radioactive waste treatment facilities (from 14:04, February 23 to 13:51, February 26, and from 10:50, February 27).
     - Accumulated water in the basement of the turbine building in Unit 2 was transferred to the miscellaneous solid waste reduction processing facilities (from 14:04, February 26 to 10:37, February 27).
     - Accumulated water in the basement of the turbine building in Unit 3 was transferred to the miscellaneous solid waste reduction processing facilities (from 14:09, February 25).
     - Accumulated water in the circulation water pump discharge valve pit in Unit 3, which was found in an investigation of the trench and the like, was transferred to the basement of the turbine building in Unit 2 (from 10:13, February 27).
     - It was confirmed that the treatment water leaked from the 2nd cesium adsorption device B-line (at around 8:30, February 25). It was assessed that the leakage was approximately one drop per second and the volume of the leakage was 10 liters (2m x 5m x 1mm). It was confirmed that the leakage point was near the welded part of the piping between the filters for water treatment, the leaked water stayed in the weir in the building, and there was no leakage to the outside of the building. Later, the 2nd cesium adsorption device was suspended (at 10:44 on the same day), and the valve
placed on the upstream was shut off and therefore the leakage stopped (at 11:10 on the same day). The surface dose rate near the leaked water was 4m to 5mSv/h. The result of the nuclide analysis of the leaked water was, I-131: less than the detection limit, Cs-134: 1.3x10^5Bq/cm^3, and Cs-137: 1.8x10^5Bq/cm^3. The 2nd cesium adsorption device B-line, in which the leakage was confirmed, was isolated, and the 2nd cesium adsorption device A-line was activated (at 18:41 on the same day), and the water flow became the stable rate of 20m^3/h (at 18:44 on the same day). Due to replacement of the piping and the filters of the 2nd cesium adsorption device B-line, in which the leakage was confirmed, the 2nd cesium adsorption device A-line was suspended (at 8:35, February 26) again. After the completion of the replacement work, the 2nd cesium adsorption device A-line and B-line were activated (at 13:31 on the same day) and later, the rated flow (33.6m^3/h) was reached (at 13:51 on the same day).

In this regard, since the stoppage of the device has not affected the treatment of the accumulated water and there is a plenty of desalinated water in a buffer tank, it will not affect the water injection into reactors.

2. Actions taken by NISA

NISA received a report from TEPCO on the response to the rise of the RPV bottom temperature in Unit 2 of Fukushima Dai-ichi NPS based on “Regarding the collection of report on the response in light of the rise of the RPV bottom temperature in Unit 2 of Fukushima Dai-ichi NPS”. In the schedule shown in the report, it is stated that the work for implementing alternative means of monitoring temperatures in reactors will be started from fiscal 2014 or later. However, even after the receipt of the report, it was confirmed that the indicated value of the temperature of one of the thermometers in Unit 2 rose sharply between February 20 and 24. If disorder of thermometer is repeated, problems may be caused for monitoring the reactor temperature. Regarding the alternative measures for monitoring the temperature of reactors, the practicable measures need to be studied and implemented as quickly as possible. Therefore, NISA directed TEPCO to report on this issue as it follows:

1. Regarding the alternative means for monitoring the reactor temperature in Unit 2 other than the present thermometers, an implementation plan is to be compiled, indicating a concrete work process and possible problems for each measure which is considered to be practical at this point. NISA directed TEPCO to report on this issue by March 1, 2012.

2. The reliability of the indicated values of the thermometers for
monitoring the temperature of reactors and the PCVs in Units 1, 2, and 3, respectively, is to be assessed and reported once a month to NISA until another direction from NISA.

- NISA has examined the necessary items for securing safety of facilities, equipment and materials mainly from the technical aspect in consideration of the lessons of the nuclear accident in Fukushima Dai-ichi NPS, TEPCO. It is necessary to grasp the installation status of the facilities and the grounds for the installation in examining the necessary items.

  However, the method of connecting the drain piping of the isolation condenser with the recirculation circuit in Unit 1 of Fukushima Dai-ichi NPS was changed between the date of approval to installation and the date of the application for approval to the construction work plan.

  As for the contents which did not reflect the actual facilities described in the attached documents to the application form for approval to installation of facilities, NISA directed TEPCO to reflect the actual state when they will submit the application form for approval to change of installation. NISA requested TEPCO to report the following items by March 12, 2012.

  1. Regarding the method of connecting the drain piping of the isolation condenser with the recirculation circuit in Unit 1 of Fukushima Dai-ichi NPS, the reason why the contents described in the application form to approval to the construction work plan dated October 25, 1967, was changed from the contents described in the document attached to the application form for approval to installation of facilities dated July 1, 1966.

  2. The reason why the change of the method of connecting the drain piping of the isolation condenser with the recirculation circuit had not been reflected in the attached document in their later application of approval to change of installation.

<Temporary access into restricted areas>

- Temporary access into the following cities and towns was allowed to residents:
  - The third round (by private cars)
    - Tomioka Town, Minamisouma Town (February 25)
    - Futaba Town, Namie Town (February 26)

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