Fukushima Nuclear Accident Update Log

Updates of 5 April 2011

Staff Report

→ Chronology of Daily Updates:

5 April  | 4 April (http://domain.com/newscenter/news/2011/fukushima040411.html)  | 3 April
         | 2 April (http://domain.com/newscenter/news/2011/fukushima030411.html)  | 1 April
On Tuesday, 5 April 2011, the IAEA provided the following information on the current status of nuclear safety in Japan:

1. Current Situation

Overall, the situation at the Fukushima Daiichi plant remains very serious.

On 3rd April, transferring of water from the Unit 1 condenser to the condenser storage tank was started in preparation for transferring water in the basement of the Unit 1 turbine building to the condenser. On 2nd April, transferring of water from the Unit 2 condenser to the condenser storage tank was started in preparation for transferring water in the basement of the Unit 1 turbine building to the condenser.

TEPCO has identified a possible leakage path from the Turbine building of Unit 2 to the sea via a series of trenches/tunnels used to provide power to the sea water intake pumps and supply of service water to the reactor and turbine buildings. On 4th April, a tracer was used in an attempt to determine where the water was coming from. So far, the tracer has not been observed in the water leaking into the sea.

In Unit 1 fresh water has been continuously injected into the reactor pressure vessel through feed-water line at an indicated flow rate of 6 m3/h using a temporary electric pump with off-site power. In Units 2 and 3 fresh water is being injected continuously into the RPVs through fire extinguisher line at indicated rates of 9 m3/h and 7 m3/h using a temporary electric pump with off-site power.

In Unit 1 the indicated temperature at the feed water nozzle of the RPV decreased from 243 °C to 234 °C and at the bottom of RPV stable at 115 °C. The RPV pressure indications are fluctuating and Drywell pressure is stable. The RPV pressure indications for the 2 channels are diverging. For Unit 2 the indicated temperature at the feed water nozzle of the RPV is stable at 142 °C. The temperature at the bottom of RPV was not reported. Indicated Drywell pressure remains at atmospheric pressure. In Unit 3 the indicated temperature at the feed water nozzle of the RPV is stable at 114°C and at the bottom of RPV...
is about 85 °C. The validity of the RPV temperature measurement at the feed water nozzle is still under investigation.

In Unit 2 additional water was injected via the Spent Fuel Cooling System line to the spent fuel pool by a temporary pump on April 4. In Unit 4, 180 T of fresh water was sprayed to the spent fuel pool by concrete pump on April 3rd.

There has been no change of status on Units 5-6 and the Common Spent Fuel Storage Facility.

2. Radiation monitoring

On 3rd April, deposition of both iodine-131 and cesium-137 was detected in 7 prefectures. The values for iodine-131 ranged from 2.4 to 82, for cesium-137 from 5.2 to 57 becquerel per square metre. On 4th April, deposition of iodine-131 was detected in 7 prefectures ranging from 3.1 to 75 becquerel per square metre. Deposition of cesium-137 in 6 prefectures ranging from 7.4 to 46 becquerel per square metre. Reported gamma dose rates in the 46 prefectures showed no significant changes compared to yesterday.

As of 3rd April, iodine-131 and cesium-134/137 was detectable in 8 and 5 prefectures respectively. All values were well below levels that would trigger recommendations for restrictions of drinking water. As of 3rd April, restrictions for infants related to I-131 (100 Bq/l) are in place in only one village of the Fukushima prefecture. The restriction is still in place as a precautionary measure.

Currently, the IAEA monitoring team is working in the Fukushima region. On 5th April, measurements were made at 7 locations at distances of 16 to 41 km, South and South West to the Fukushima nuclear power plant. The dose rates ranged from 0.3 to 31 microsievert per hour. At the same locations, results of beta-gamma contamination measurements ranged from 0.01 to 3.2 megabecquerel per square metre. The highest dose rates and beta gamma contaminations were measured at the location closest to the Fukushima Nuclear Power Plant.

Since our written briefing of yesterday, data related to food contamination was reported on 4 April by the Japanese Ministry of Health, Labour and Welfare. These reported analytical results covered a total of 24 samples taken on 31 March (4 samples) and 1st, 3rd and 4th April (20 samples). Analytical results for all of the 24 samples for various vegetables, fruit (strawberry) and seafood in five prefectures (Gunma, Ibaraki, Niigata, Saitama and Tochigi) indicated that
iodine-131, caesium-134 and/or caesium-137 were either not detected or were below the regulation values set by the Japanese authorities.

The IAEA/FAO Food Safety Assessment Team has completed its tasks and returned to Vienna. The team met with relevant local government officials and stakeholders in the agriculture sector in the four prefectures (Fukushima, Ibaraki, Tochigi and Gunma) most affected by the nuclear emergency in Fukushima. The team were appraised on the local situation and provided relevant technical information.

On 31st March, the team reported to the Japanese Cabinet Office, the Ministry of Foreign Affairs, the Ministry of Health, Labour and Welfare, and the Ministry of Agriculture, Forestry and Fisheries in Tokyo. The team returned from their mission on 1 April.

Seawater is collected daily close to the discharge areas of Units 1 - 4 and of Units 5 and 6 at the Dai-ichi NPP. The data show a decreasing trend from 1 to 3 April from about 66 kBq/l to 24 kBq/l for I-131 and 21 kBq/l to 10 kBq/l for both Cs-134 and Cs-137 at Units 1-4. The concentrations at Units 5 and 6 also showed a decreasing trend until 3 April. These values were measured before the discharge of low level contaminated water authorised by the Japanese Government on the 4th April.

New data were provided for the off-shore survey on 8 sampling points about 30 km east of the NPPs. Concentrations are between 5 and 18 Bq/l for I-131 and between roughly 1 and 11 Bq/l for Cs-137. For the new coverage of the coastal transect in the south, about 35 km south of Fukushima Daiini, the highest concentrations were detected at the sampling point closest to the coast in the south with about 38 Bq/l for I-131 and 4.5 Bq/l for Cs-137. The concentrations at all sampling points have decreased over time.

3. IAEA Activities

The two agency experts in BWR technology are in Japan. A third agency expert will join them in Tokyo to have additional meetings with TEPCO at the end of the week.

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