

Earthquake Report - JAIF

We have been reporting a status of Fukushima Daiichi nuclear power station by summarizing news aired by NHK, which is Japanese national broadcasting company. We regard it as most credible news among many news sources and we are happy to say that NHK's English website has gotten enriched and now you can see movies and English scripts at <http://www3.nhk.or.jp/daily/english/society.html>. Given this situation, we decide to simply place these scripts as it is for the record in case that it will be deleted from the website later, rather than summarizing news as we did.

No. 60: 20:00, April 22

NHK news regarding status of Fukushima Daiichi nuclear power station yesterday and today.

●US NRC: Fukushima plant "static but fragile"

The US Nuclear Regulatory Commission says conditions at the Fukushima Daiichi nuclear plant are "static but fragile" in its latest assessment of the nuclear emergency.

The Commission compiled the report as of April 15th, along with the US Energy Department and other nuclear organizations.

The report suggests that ongoing operations to feed the reactors with water could be affected by the occurrence of more aftershocks.

It recommends a more diversified and redundant feeding system, along with the automation of operations involving large cranes and other equipment to douse the reactors with water.

The report estimates that 67 percent of nuclear fuel has been damaged at reactor No.1, 44 percent at reactor No.2 and 30 percent at reactor No.3.

It says these estimates do not differ greatly from those provided by the plant operator, Tokyo Electric Power Company.

TEPCO has estimated the rate of damage at 70 percent at reactor No.1, 30 percent at No.2, and 25 percent at No.3.

The US Nuclear Regulatory Commission is due to brief the Senate on the latest conditions at the plant on April 28th.

Friday, April 22, 2011 17:42 +0900 (JST)

●TEPCO removes polluted water, debris at nuke plant

Tokyo Electric Power Company is struggling to remove highly radioactive debris scattered around the reactors of the troubled Fukushima Daiichi nuclear power plant.

The contaminated obstacles have to be cleared away so that workers can focus on stabilizing the reactors.

On Friday, the plant operator also continued work to pump highly radioactive water out of a tunnel linked to the No. 2 reactor, the 4th day of the operation. The toxic water is being transferred to a waste-processing facility.

TEPCO said at 7 AM on Friday, the level in the tunnel had dropped by 5 centimeters. It said no more leaks had been detected so far.

Contaminated debris, possibly the result of hydrogen explosions at the No. 1 and

Earthquake Report - JAIF

3 reactors, is scattered across the plant compound.

On Friday, TEPCO was preparing to remove the wreckage near the No.3 reactor building. It hopes to start the clean-up using remote-controlled machines as early as Saturday.

The radioactive debris around the reactor has prevented workers from assessing the situation in the reactor buildings.

Friday, April 22, 2011 12:56 +0900 (JST)

●Evacuation area officially expanded

The Japanese government has announced the official expansion of the evacuation zone around the troubled Fukushima Daiichi nuclear power plant to selected areas beyond the existing 20-kilometer radius. Residents of the new areas are being asked to evacuate by the end of May.

Chief Cabinet Secretary Yukio Edano said on Friday that the government made the designation since residents there could be exposed to cumulative radiation levels of 20 millisieverts or more per year if they stay.

The 5 new municipalities are located to the northwest of the plant and are more than 20 kilometers from it.

Edano said that due to the possible impact on residents' health, the government is now urging them to evacuate within about a month.

Friday's announcement followed the establishment at midnight Thursday of a no-entry zone within a 20-kilometer radius of the Fukushima Daiichi plant.

Edano also designated parts of areas within 20 to 30 kilometers of the plant as areas in which residents should remain indoors or be prepared to evacuate at any time in case of an emergency.

With this designation, the government lifted an earlier instruction to stay indoors for people in the 20- to 30-kilometer zone.

Friday, April 22, 2011 12:29 +0900 (JST)

●No-entry zone established in Fukushima

A no-entry zone has been imposed for the area within 20 kilometers of the troubled Fukushima Daiichi nuclear power plant.

At midnight on Thursday, the off-limits zone was set up in 9 municipalities around the plant in line with a law governing disasters.

Authorities set up 75 checkpoints on the roads leading to the areas within the zone.

On Thursday night, before the no-entry zone was established, local residents were seen moving out of the zone in cars after being allowed to return temporarily to collect things left behind.

One woman entered the zone late on Thursday night. She said she came from Tokyo where she was sheltering and she was going to see how her pet was. She said she was wondering whether the zone was really dangerous.

Then at midnight on Thursday, a policeman at a checkpoint sealed off the road, changing the electric sign from 'Restricted Entry' to 'No Entry.'

The government plans to allow residents to temporarily return home, excluding areas within 3 kilometers of the plant, and all municipalities involved are preparing for temporary returns.

Earthquake Report - JAIF

Friday, April 22, 2011 09:06 +0900 (JST)

●Radioactive water likely to hamper cooling effort

The operator of the Fukushima nuclear power facility plans to cool the reactors by filling their vessels with water. However, that process may be hampered by wastewater contaminated with highly radioactive materials.

According Tokyo Electric Power Company's blueprint for bringing the troubled facility under control, the Number 1 and 3 reactor vessels will be filled with water up to the height of the nuclear fuel rods by the middle of July. This is aimed at cooling the reactors in a stable manner.

TEPCO says that the water level has begun rising in the Number 1 reactor. It says water injected to cool the reactor vaporizes out of the reactor and then turns into water after being cooled inside the container.

However, if the container has been damaged, then highly radioactive water may seep out.

The utility needs to check the reactor turbine building for any water leakage from the building housing the reactor, but workers cannot enter the reactor building at present. However, the effort to identify the source of a leak is difficult because of radioactive water inside the basement of the turbine building.

Work to move contaminated water from the Number 2 reactor is already underway. However, it's not clear when they can begin moving contaminated water from the Number 1 reactor.

TEPCO says the vessels containing the reactors are strong enough even if they are filled with water. However, the Nuclear Safety and Industry Agency believes that it is necessary to confirm whether the container is resistant to powerful earthquakes.

After the March 11th tsunami knocked out the plant's backup power generators, water was injected to cool the reactors and spent fuel rod pools. As a result, the presence of radioactive water is hampering efforts to restore the reactors' cooling systems.

Friday, April 22, 2011 06:49 +0900 (JST)

●Radioactive level up at reactor water intake

The operator of the troubled Fukushima nuclear power plant says it has detected higher levels of radioactive material in sea water samples near the water intake of one of the reactors.

The Nuclear Safety and Industry Agency says, however, there are no traces of highly radioactive water leaking into the sea from the plant.

Tokyo Electric Power Company says it detected 1,600 becquerels of radioactive iodine-131 per cubic centimeter in samples of sea water collected near the water intake for the Number 2 reactor on Wednesday morning. The figure is 4,000 times the national limit and higher than the level detected on Tuesday.

It's the same site where water contaminated with highly radioactive material was found to have been leaking into the sea on April 2nd. The leakage was fixed 4 days later.

TEPCO says it also detected radioactive cesium-134 at 2,300 times the limit and cesium-137 at 1,600 times the limit on Wednesday morning. These levels are also

Earthquake Report - JAIF

higher than those detected on Tuesday.

The Nuclear Safe and Industry Agency explains that sea water containing highly dense radioactive material is piling up due to a special fence set up in the area to keep the leakage of the contaminated water from the Number 2 reactor water intake. It says it sees no new leakage of highly radioactive water.

TEPCO says the levels of radioactive material are on the decline at the 4 monitoring points off the coast of the Fukushima Daiichi nuclear power plant.

The highest level in the latest checkup for cesium-134 is 5.3 times the national limit at a point about 10 kilometers south of the plant.

Friday, April 22, 2011 02:09 +0900 (JST)

●TEPCO estimates 520-ton radioactive water into sea

Tokyo Electric Power Company says radioactive substances that leaked into the sea at the damaged Fukushima plant over six days from April 1st are estimated at 4,700 terabecquerels. This is 20,000 times more than the annual allowable limit at the complex.

At a news conference on Thursday, Tokyo Electric said it calculated the total amount of leaked water assuming that the leak began on April 1st. The leak of contaminated water from a pit of the Number 2 reactor was found on April 2nd and was stopped four days later using liquid glass.

The utility firm said that 520 tons of the high-level radioactive water is likely to have leaked into the sea during the period.

The estimated level of radiation in the water is roughly one 100th of what the government announced on Tuesday of last week as the total amount of radiation released into the air from the Daiichi complex. The figure is about 10,000 times more than that released in the Three Mile Island accident in 1979.

Levels of iodine-131 were found to be 7.5 million times the safety limit on April 2nd near the water intake of the Number 2 reactor. Tokyo Electric has since set up underwater barriers near the intake to prevent the spread of radioactive water in the sea.

The radiation level of seawater in the area has been gradually falling and, as of Tuesday, the iodine level was 1,200 times the limit.

Tokyo Electric says radioactive water may possibly be still leaking out through unidentified routes. The firm is trying to determine the routes and to continue monitoring data and grasping the impact of the radioactive water on marine life and the sea.

Thursday, April 21, 2011 15:13 +0900 (JST)

End