

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. 65: 20:00, April 27

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

●TEPCO revises nuclear fuel damage ratios

The operator of the troubled Fukushima Daiichi nuclear plant in northeastern Japan has reassessed its estimates of fuel damage in reactors No.1 to No.3.

Tokyo Electric Power Company on Wednesday announced new estimates of damage after the country's nuclear safety agency questioned the accuracy of the initial assessments. The utility has revised the estimated fuel damage in the No.1 reactor from 70 percent to 55 percent, saying radiation levels were not correct.

TEPCO also says that it acted inappropriately in excluding fuel damage of less than 5 percent in calculating total damage ratios for the No.2 and No.3 reactors.

As a result, the utility revised upward its estimates of damaged fuel in the No.2 and No.3 reactors by 5 percentage points each to 35 percent and 30 percent respectively.

The company released its initial estimates as of March 15th, based on radiation levels in the reactors and their containment vessels.

Earlier this month, the Nuclear and Industrial Safety Agency raised the crisis level at the Fukushima plant to the highest 7 on the international scale, based on its estimate of the volume of released radioactive substances.

TEPCO says the corrected estimates will not affect the agency's crisis rating.

Wednesday, April 27, 2011 18:36 +0900 (JST)

●Radiation monitors delivered to Fukushima schools

The education board of Fukushima Prefecture, northeastern Japan, has handed out radiation monitors to local schools and kindergartens.

Some elementary and junior high schools in the prefecture were advised to restrict outdoor activities of students to prevent possible exposure to radiation from the troubled Fukushima Daiichi nuclear power plant.

On Wednesday, radiation monitors were given to 55 educational facilities from kindergartens to high schools.

An elementary school teacher said he will keep a daily log of radiation data, which he hopes will ease concern among children and parents.

The prefectural education board will compile radiation data from schools and kindergartens each week and report the outcome to the education ministry.

Wednesday, April 27, 2011 15:05 +0900 (JST)

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●Radioactive topsoil removed from school grounds

Workers are removing radiation-tainted topsoil from school grounds in the northeastern Japanese city of Koriyama. The city is about 50 kilometers from the Fukushima Daiichi nuclear power plant.

The city began removing the soil on Wednesday at two of the 28 public elementary and junior high schools and daycare centers.

Radiation levels at one of the schools are higher than the central government's new safe limit for children playing outdoors. That limit is 3.8 microsieverts per hour. Other schools are close to the limit.

A heavy machine is used to scrape off the surface layer of the soil after it has been sprayed with water to keep the dust down.

The city will allow resumed use of the school grounds for up to one hour each day, once a safe level of radiation is confirmed.

The city's schools and daycare centers have been restricting outdoor activities due to leaks of radioactive substances from the nuclear plant.

The removed soil is being kept under a cover at the school grounds until it can be moved to a landfill site.

Wednesday, April 27, 2011 14:41 +0900 (JST)

●Woman at nuke plant exposed to excess radiation

A woman working at the crippled Fukushima nuclear plant was found to have been exposed to radiation of more than 3 times the legal safety limit.

The woman, in her 50s, showed no health problems in a medical checkup.

Her employer, Tokyo Electric Power Company, says the woman was in charge of managing disaster-related supplies and showing firefighters around the plant's compound.

She worked at the plant for 11 days after the March 11th earthquake and tsunami, and was exposed to 17.55 millisieverts of radiation. The figure is more than 3 times the permissible amount for women, which is set at 5 millisieverts per 3 months.

The woman may have inhaled radioactive material when taking off protective gear, as internal exposure of 13.6 millisieverts accounted for much of the total.

The limit for workers at the Fukushima plant was raised from 100 to 250 millisieverts per year after the accident to cope with the emergency. But the limit for women was left unchanged due to their child-bearing possibilities.

Senior official of the Nuclear and Industrial Safety Agency, Hidehiko Nishiyama, told reporters it is very sorry that the woman was exposed to excessive radiation.

It says it has already reprimanded TEPCO verbally, and plans to order it in writing to find out why this happened and take steps to prevent a recurrence.

Wednesday, April 27, 2011 14:31 +0900 (JST)

●TEPCO starts tests for more water injection

Tokyo Electric Power Company has begun testing one of the damaged reactors at the Fukushima Daiichi nuclear power plant to see if it can move forward with its plan to submerge and cool the hot fuel rods.

TEPCO began pumping more water into the No.1 reactor on Wednesday in order to monitor changes in the water depth in the containment vessel and check for

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leaks.

The test is part of a plan to fill the No.1 and No.3 reactors' containment vessels with water by July, to cool the fuel rods in a stable manner.

TEPCO says it will raise the amount of water injected from 6 to 10 tons per hour for 6 hours, and then to 14 tons per hour. The temperature and pressure in the containment vessel will be monitored for 18 hours.

The utility says it will decrease the flow back to 6 tons per hour by Thursday morning and then send robots into the reactor building to check for leaks.

TEPCO also says it will make sure that the containment vessel, with the added weight of the water inside, can withstand strong aftershocks.

The firm says robots on Tuesday detected radiation levels of up to 1,120 millisieverts per hour inside the No.1 reactor building. It says some contaminated water may be leaking from the reactor into external pipes.

Wednesday, April 27, 2011 12:37 +0900 (JST)

● Science ministry releases Fukushima radiation map

Japan's science ministry has for the first time released a map projecting estimated cumulative radiation exposure near the troubled Fukushima Daiichi nuclear power plant.

The contour map shows the amount of annual cumulative radiation that a person would be exposed to by staying outdoors for 8 hours per day through March 11th, 2012.

It's based on readings at 2,138 points near the quake and tsunami-hit Fukushima Daiichi complex on or before last Thursday, including areas within 20 kilometers of the plant.

Earlier this month, the government's Nuclear Safety Commission released an estimated cumulative radiation map that only gave figures for areas outside the 20 kilometer radius.

This was when the commission proposed its plan for the government to call on residents within high-level zones to evacuate within about one month. The evacuation zone included areas farther than 20 kilometers from the plant where annual radiation exposure is expected to reach 20 millisieverts or more.

The science ministry says the estimated annual levels on its map, based on the latest figures, are mostly lower than those on the commission's map.

Goshi Hosono, a senior member of the government's nuclear taskforce, says it's unlikely the new map will prompt a change in the evacuation areas.

The science ministry says it will update its data twice a month on its website. It also says it plans to release a map of radiation levels in the soil.

Wednesday, April 27, 2011 10:38 +0900 (JST)

● Water may be leaking from No. 4 reactor fuel pool

The operator of the troubled Fukushima Daiichi nuclear power plant says water may be leaking from the spent fuel pool of the No. 4 reactor.

More than 1,500 spent fuel rods are stored in the pool, the largest number at the site.

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Tokyo Electric Power Company, or TEPCO, has been injecting water daily into the pool to make up for the loss of cooling function and prevent the fuel rods from being exposed and further damaged.

TEPCO has poured in 140 to 210 tons of water over each of the last few days.

The company found that water levels in the pool were 10 to 40 centimeters lower than expected despite the water injections.

The walls of the reactor building supporting the pool were severely damaged by a hydrogen explosion last month. TEPCO says the pool may have been damaged by the blast as well.

According to a schedule announced earlier on containing the ongoing emergency, TEPCO plans to install concrete pillars to support the fuel pool by around July to increase its earthquake resistance.

Wednesday, April 27, 2011 09:05 +0900 (JST)

●Experts: Quakes increased before March 11 disaster

Experts say increased seismic activities in the Pacific Ocean in recent years may have been a sign of the massive quake of March 11th.

The Coordinating Committee for Earthquake Prediction, which consists of experts from universities and research institutes, met on Tuesday to discuss last month's quake and tsunami. A Tohoku University research group said seismic activities started to increase off eastern prefectures from Miyagi to Ibaraki about 3 years before the massive quake.

Nagoya University Professor Koshun Yamaoka said research by a national institute shows that the focuses of small quakes in the 2 days before March 11th gradually moved closer to the focus of the massive earthquake.

Professor Yamaoka said these seismic activities may have been an indicator of the mega-quake that followed.

The Geospatial Information Authority of Japan said coastal areas of Miyagi and Chiba prefectures sank during the huge quake, but some rose 5 to 8 centimeters afterwards. The authority said tectonic plates have continued to shift since the massive quake.

CCEP Vice Deputy Chairman and Tohoku University Graduate School Professor Toru Matsuzawa told reporters that relatively big earthquakes struck off Japan's northeast during a short period in the past, but the huge quake was beyond prediction. He said his group will closely monitor seismic activities and tectonic movements.

Wednesday, April 27, 2011 06:29 +0900 (JST)

●Radioactive water carried from No.2 reactor

The operator of the troubled Fukushima Daiichi nuclear power plant has said it is giving top priority to transferring highly contaminated water from the No.2 reactor.

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Radioactive water in reactor buildings and other areas of the plant is hampering work to bring the accident under control.

Electric Power Company, or TEPCO, says the radiation level in a tunnel at the No.2 reactor is especially high, and is transferring the water to a temporary storage site.

But the firm has also found high levels of radioactive substances at the site of the No. 4 reactor.

Last Thursday it detected 8,100 becquerels of cesium 137 and 7,800 becquerels of cesium 134 per cubic centimeter in the water in the turbine building's basement. The radioactive levels were about 250 times higher than a month before.

TEPCO says the contaminated water levels are rising.

At the No.3 reactor, the contaminated water level in a tunnel is also rising. The firm says the water was 98 centimeters from the top of the tunnel as of Tuesday morning.

TEPCO sets one meter as the limit at which it should begin removing contaminated water, but it has not yet found a location to transfer the contaminated water to.

Tuesday, April 26, 2011 19:27 +0900 (JST)

●Governor inspects Onagawa nuclear power plant

Officials of the Miyagi prefectural government have conducted safety checks at Onagawa nuclear power plant, which shut down automatically following the March 11th earthquake and tsunami.

A group of about 15 officials, including Governor Yoshihiro Murai, visited the plant located in the prefecture on Tuesday. The plant is operated by Tohoku Electric Power Company.

All 3 reactors at the plant remain shut down, and one of 2 power cables linking to the cooling system generator at the No.2 reactor has been rendered useless due to flooding.

Murai inspected the damage, and asked utility officials about safety measures at the plant.

The governor then visited, and offered encouragement to, some 150 evacuees taking shelter in a gymnasium at the plant after the tsunami caused damage to their homes.

He later assured local residents that the plant's reactors are in safe shutdown.

Asked about the timing of the restart of the plant, Murai said he believes it's impossible to get rid of all nuclear power plants immediately.

He said his decision will be based on whether the plant can clear new standards to be set up by the state government.

Tuesday, April 26, 2011 19:27 +0900 (JST)

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●TEPCO to fill No.1 reactor with water

The operator of the damaged Fukushima Daiichi nuclear power plant has checked the interior of the No.1 reactor for leaks, before increasing the level of water in order to cool the fuel rods.

Tokyo Electric Power Company, or TEPCO, plans to finish filling the No.1 and No.3 reactor containment vessels by mid-July in order to submerge the fuel rods and cool them down stably.

The utility is currently pumping 6 tons of water per hour into the No.1 reactor. Some of that water is turning into steam, then turning back into water and pooling inside the containment vessel.

The water is now believed to be about 6 meters deep.

In order to submerge the fuel rods, TEPCO must pump more water into the vessel and make the pool about 18 meters deep.

On Tuesday, the utility sent remote-controlled robots inside the reactor building to check for leaks and other damage. No major problems were found.

TEPCO plans to increase the amount of water being fed into the reactor to 14 tons per hour starting on Wednesday, on an experimental basis.

Workers will monitor changes in temperature and pressure to see whether the reactor container can safely hold the water, while robots will enter the building again to check for leaks.

The government's nuclear safety agency says TEPCO also needs to determine whether a water-filled reactor container can withstand strong aftershocks.

Tuesday, April 26, 2011 19:01 +0900 (JST)

●Resin spraying starts at nuclear plant

At the damaged Fukushima nuclear power plant, workers have begun spraying a chemical hardening agent to prevent the spreading of radioactive dust.

Radioactive dust is scattered on the plant's compound as a result of hydrogen explosions at 2 of the plant's 6 reactors in March.

The plant's operator, the Tokyo Electric Power Company, or TEPCO, says 3-week test-spraying of the agent proved that it keeps radioactive dust from being blown away.

TEPCO plans to spray 1-million cubic meters of the agent on the 500,000-square-meter compound by the end of June.

The test-spraying was done by workers using a hose, but a remote-controlled vehicle will be used for further spraying to minimize workers' radiation exposure. The spraying is to be followed by work to cover reactor buildings with huge filter sheets to prevent further releasing of radioactive material into the environment.

Tuesday, April 26, 2011 18:34 +0900 (JST)

End