

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. 99: 18:00, June 1

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

(Fukushima NPP Site)

- **NISA urges TEPCO to set policy for decontamination**
- **Radiation levels fall in Fukushima seawater**
- **Cooling system operating at No. 2 reactor**
- **Oxygen cylinder bursts near No. 4 reactor**
- **Fukushima cleanup could cost up to \$250 billion**

(Other news)

- **10,000 children flee Fukushima over nuke fears**
- **IAEA team submits report to Japan government**
- **Snow on Fukushima peaks found to be radioactive**
- **Evacuees pick up their cars from no-entry zone**
- **Long sleeve uniforms urged in Fukushima**
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- **New reactor postponed at Shimane nuke power plant**
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●NISA urges TEPCO to set policy for decontamination

Japan's Nuclear and Industrial Safety Agency is urging Tokyo Electric Power Company to lay out its plans for decontaminating the radioactive water that continues to accumulate at the Fukushima Daiichi nuclear plant.

TEPCO says the heavy rain until Tuesday has increased the volume of highly radioactive water inside the plant.

The utility says the level of radioactive water rose by 6.2 centimeters in an underground tunnel extending from the No.2 reactor building during the 24 hours through Wednesday morning.

In the basement of the reactor's turbine building, the water rose by 6 centimeters. Water levels also rose by more than 2 centimeters in the tunnel of the No.3 reactor, and in the basement of the reactor's turbine building.

The government's nuclear safety agency is asking TEPCO to secure new storage sites to which the contaminated water can be quickly transferred, and to lay out its plans for decontamination.

It is asking the utility to come up with the plans later on Wednesday, as the rainy season is approaching, bringing increased risks that the water will seep out.

Contaminated water is already flooding the basements of the turbine and reactor buildings, partly due to water injections to cool down the reactor cores.

Wednesday, June 01, 2011 12:25 +0900 (JST)

●Radiation levels fall in Fukushima seawater

Tokyo Electric Power Company says radiation levels have fallen in seawater near the Fukushima Daiichi nuclear plant.

The utility said on Tuesday it had detected 3.1 becquerels of cesium 134 per cubic meter of seawater near the water intake of the No.3 reactor.

The reading is 52 times the national limit, but the lowest since TEPCO began checking radiation levels near the intake after the nuclear accident that followed the March 11th earthquake and tsunami.

On May 11th, a level 32,000 times the national limit was detected at the same location due to a leak of highly contaminated water from the plant.

Cesium 134 was found in seawater 16 kilometers from the plant on Monday, but the level was below the limit set by the government.

The utility said the level of radioactive iodine near the water intake at the No.2 reactor was 160 times the limit on Monday.

But the reading was less than one-third of the previous day's figure.

TEPCO said it found radioactive strontium in seawater samples taken at 4 locations off Fukushima Prefecture on May 9th, but the levels were all below the national limit.

Radioactive strontium is produced during the nuclear fission of uranium. It was found in seawater off Fukushima in April.

TEPCO said the substance probably came from the damaged plant. The utility also said the detected levels were very low, but it will continue to monitor the seawater.

Wednesday, June 01, 2011 02:59 +0900 (JST)

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●Cooling system operating at No. 2 reactor

The operator of the troubled Fukushima Daiichi nuclear power plant has started operating a system to effectively cool water in a spent fuel pool in the plant's No.2 reactor building.

The Tokyo Electric Power Company on Tuesday set up at the building the first circulatory cooling system to be installed at the plant since the accident in March. The utility has been pumping about 50 tons of water into the pool every few days. The pool's temperature is around 70 degrees Celsius, apparently producing steam that has filled the building and resulted in a humidity level of 99.9 percent.

The humidity and high radiation levels have been hampering repair work at the site.

The new system is to pump water out of the pool to a heat exchanger and return the water to the pool as coolant.

The firm says it plans to lower the pool's temperature to around 40 degrees Celsius in a month and hopes to reduce the humidity level before installing equipment to remove radioactive substances in the building.

The firm says it will start operating similar systems at the plant's No.1 and 3 reactors in June, and at the No.4 reactor in July.

Tuesday, May 31, 2011 20:57 +0900 (JST)

●Oxygen cylinder bursts near No. 4 reactor

An oxygen cylinder has burst at the Fukushima Daiichi nuclear plant. But the plant operator says the blast caused no damage to the plant's facilities, and no injuries.

At around 2:30 PM on Tuesday, workers reported hearing a loud noise like that of an explosion at the south side of the plant's No. 4 reactor.

The Tokyo Electric Power Company says unmanned heavy machinery removing debris at the site damaged the cylinder, causing it to burst.

Tuesday, May 31, 2011 18:48 +0900 (JST)

●Fukushima cleanup could cost up to \$250 billion

A private think tank says the accident at the Fukushima Daiichi nuclear plant could cost Japan up to 250 billion dollars over the next 10 years.

The estimate is part of the Nuclear Safety Commission's ongoing survey of opinions on the disaster from nuclear and other experts.

Kazumasa Iwata, president of the Japan Center for Economic Research, gave the estimate on Tuesday.

He said the costs of the accident could range from nearly 71 to 250 billion dollars. The figure includes 54 billion to buy up all land within 20 kilometers of the plant, 8 billion for compensation payments to local residents, and 9 to 188 billion to scrap the plant's reactors.

Iwata said a drastic review of the government's nuclear energy policy is necessary to fund the cleanup.

He said the government could channel about 71 billion dollars to the necessary fund over the next decade by freezing research and development projects linked to the nuclear fuel cycle.

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Another 150 billion could come from Tokyo Electric Power Company's reserve fund, and the government's nuclear energy-related budgets.

The Nuclear Safety Commission plans to continue interviewing experts over the coming months, and to incorporate outside ideas in future debates on nuclear energy.

Tuesday, May 31, 2011 17:28 +0900 (JST)

●10,000 children flee Fukushima over nuke fears

Japan's education ministry says about 10,000 children have moved out of Fukushima Prefecture following the March 11th disaster and crisis at the Fukushima Daiichi nuclear power plant.

On Wednesday, the ministry announced that the number of school-age children who have left Fukushima -- from kindergarteners to high school students -- reached 9,998 as of May 1st.

They include 974 kindergarten pupils, 5,785 elementary school children, 2,014 junior high school students and 1,129 senior high school students.

The prefectures of Saitama, Niigata and Tokyo have each welcomed more than 1,000 children from Fukushima. The other children relocated elsewhere across the country.

The Fukushima board of education attributes the exodus to the nuclear accident, as the number of children who left the prefecture accounts for about 85 percent of the total from the 3 hardest-hit regions of Iwate, Miyagi and Fukushima.

An additional 5,500 children have changed schools within Fukushima Prefecture.

Wednesday, June 01, 2011 16:52 +0900 (JST)

●IAEA team submits report to Japan government

A team from the International Atomic Energy Agency has submitted to the Japanese government a summary report of its investigation into the disaster at Fukushima Daiichi nuclear power plant.

The 18-member team inspected the plant and other nuclear facilities from May 24th, before an IAEA ministerial meeting on nuclear safety starts on June 20th in Vienna.

Team leader Michael Weightman handed the report to the prime minister's advisor Goshi Hosono in Tokyo on Wednesday.

The report points out that Japan underestimated the impact of the tsunami. It urges the government to correctly assess the risks of all natural disasters, and draw up protective measures in the design and operation of nuclear power plants.

The report adds that Japan's Nuclear and Industrial Safety Agency should be independent and given a clear role based on IAEA standards, so it can respond appropriately to disasters.

Hosono thanked the team for its extensive and detailed investigation, and said the Japanese government will make the best use of the report as it probes the crisis.

Weightman said his team had been given access to all the information it needed, and was able to compile the report quickly. He said the accident in Fukushima has lessons that can be shared by all countries.

Wednesday, June 01, 2011 15:59 +0900 (JST)

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●Snow on Fukushima peaks found to be radioactive

Snow in the mountains in Fukushima Prefecture is showing radioactive contamination at levels above the safety limit for drinking water.

Researchers from Fukushima University performed the analysis with a local environmental group. They sampled snow in 31 locations and at different altitudes from 7 peaks around Fukushima city, from mid-April through early May. The results showed that snow in 14 locations contained more than 200 becquerels per kilogram of radioactive cesium, the adult safe limit for drinking water.

A sample of snow from an altitude of 1,300 meters contained 3,000 becquerels of cesium.

Fukushima University Vice-President Akira Watanabe specializes in meteorology and says the data support his team's analysis that radioactive substances scattered at an altitude of 1,300 meters.

He is urging mountain climbers not to drink river water or gather edible wild plants, now that high levels of radioactivity in the snow have been confirmed.

Wednesday, June 01, 2011 15:40 +0900 (JST)

●Evacuees pick up their cars from no-entry zone

Evacuees from the no-entry zone around the Fukushima Daiichi nuclear plant have returned briefly to their homes to collect their cars.

21 evacuees from Kawauchi Village and 38 from Minami-soma City participated in the 1st car pickup operations on Wednesday.

The participants from Kawauchi gathered in a gymnasium to receive instructions. They then changed into protective clothing and boarded a bus that took them to their homes.

They were allowed to stay in the area for about 2 hours and had up to 10 minutes to start their cars. Vehicles whose engines would not restart had to be left behind. Japan Automobile Federation workers accompanied the participants to help them deal with problems.

The participants were told to keep the windows of their vehicles closed and to refrain from using air conditioners to keep out radioactive materials.

After the cars are driven out of the no-entry zone, tests will be conducted to determine whether the vehicles are contaminated with radiation.

Wednesday, June 01, 2011 13:47 +0900 (JST)

●Long sleeve uniforms urged in Fukushima

Some schools near the damaged Fukushima Daiichi nuclear power plant are urging that children continue to wear long-sleeves in summer, to limit their exposure to radioactive fallout.

The schools issued the advice on Wednesday, the day many students switch to summer uniforms. The move is a response to parents' concerns about radioactivity.

Radiation exceeding levels permitted by the government has been found at some schools in Fukushima Prefecture. The schools have been removing topsoil in their playgrounds and limiting outdoor activities.

At Koken Junior High School in Koriyama city on Wednesday, almost no

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students were seen wearing short-sleeves.

The school says students can choose to wear their long-sleeved gym wear or the long-sleeved summer uniform.

Wednesday, June 01, 2011 13:32 +0900 (JST)

●Utilities report 342 faults near nuclear plants

Japan's electric power companies have reported 342 faults and geographical changes near nuclear power plants that they previously did not consider to be risks.

The companies filed the reports with the industry ministry's Nuclear and Industrial Safety Agency.

An aftershock of the March 11th earthquake on April 11th is known to have shifted a fault about 50 kilometers from the troubled Fukushima Daiichi nuclear plant. The fault had been believed to be inactive.

The agency instructed the utilities to reassess their plants' earthquake resistance and reexamine faults and geographical changes where plant operators had said the risk of earthquake damage was little or none.

The utilities said previous studies had located 342 faults and geographical changes but that they had not taken them into account in assessing their plant's earthquake resistance.

These locations are said to have posed less risk because they have been inactive for more than 120,000 years or have not been regarded as faults as a result of erosion.

The agency will assess the companies' reports and conduct field studies if necessary. The utilities are to reconsider the possible risks these faults may pose to their plants.

Wednesday, June 01, 2011 10:32 +0900 (JST)

●IAEA: Japan underestimated tsunami impact

A team from the International Atomic Energy Agency will submit a summary of its report to the Japanese government on Wednesday after concluding its investigation into the nuclear disaster in Fukushima.

The 18-member team inspected the damaged Fukushima Daiichi nuclear plant and other nuclear facilities beginning May 24th.

The draft of the IAEA summary report says Japan took the best possible measures immediately after the accident at the Fukushima Daiichi plant, but it underestimated the danger of tsunami. The draft says it is hard to expect that Japan could have done more than it did soon after the accident occurred, with all safety systems lost and with insufficient manpower and lighting.

But the draft says Japan underestimated the impact of the tsunami and failed to respond to waves that were higher than had been expected.

It also says the chief characteristic of Japan's worst nuclear accident is that 4 reactors were exposed to the risk of meltdowns.

The report calls on Japan to revise its current process of dealing with a severe nuclear accident. This process is based on the assumption that lighting and electricity would be available in such an accident.

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The team criticizes Japan for failing to ensure the independence of the Nuclear and Industrial Safety Agency, despite the advice given 3 years ago by the IAEA that the agency should be separated from the Economy, Trade and Industry Ministry.

The team will submit a full report to an IAEA ministerial meeting that will open on June 20th in Vienna.

Wednesday, June 01, 2011 07:35 +0900 (JST)

●High levels of strontium detected at Fukushima

The operator of the Fukushima Daiichi nuclear power plant says it has detected high levels of a radioactive substance that tends to accumulate in human bones. Tokyo Electric Power Company says it took soil samples on May 9th at 3 locations about 500 meters from the No.1 and No.2 reactors and analyzed them. The utility detected up to 480 becquerels of radioactive strontium 90 per kilogram of soil. That's about 100 times higher than the maximum reading recorded in Fukushima Prefecture following atmospheric nuclear tests carried out by foreign countries during the Cold War era.

TEPCO reported detecting 2,800 becquerels of strontium 89 per kilogram of soil at the same location.

This is the second time since April that radioactive strontium has been found inside the plant compound.

The substance was also detected in soil and plants more than 30 kilometers from the Fukushima nuclear power station in March.

When people inhale radioactive strontium, it accumulates in bones. Scientists say that strontium could cause cancer.

Tokyo Electric Power says it believes that radioactive strontium was released from the damaged plant and it will continue to monitor radiation levels.

An expert on radioactive substances says he thinks radioactive strontium may continue to be detected around the Fukushima Daiichi nuclear plant. But he says the strontium levels that might be detected in soil will be far lower than those of the radioactive cesium released in the accident by a factor of several thousand.

Yoshihiro Ikeuchi of the Japan Chemical Analysis Center says strontium tends to accumulate in bones, like calcium. But he also says its levels in the air are thought to be lower than those for soil and even if people inhale the substance, no health problems will be caused by such internal exposure to radiation.

Wednesday, June 01, 2011 02:59 +0900 (JST)

●New reactor postponed at Shimane nuke power plant

The Chugoku Electric Power Company says it will postpone the start of the commercial operation of a new reactor at the Shimane nuclear power station without setting a timetable.

The utility said on Tuesday that additional safety measures are needed to start the Number 3 reactor being constructed at the plant.

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The company had planned to put nuclear fuel rods in the reactor and start a test operation in June, and make it commercially operational in March next year. Following the accident at the Fukushima plant, the utility faces the need to build seawalls that can withstand 15-meter-high tsunami waves and to think of ways to prevent the inundation of reactor buildings.

The utility also said a problem with a device for moving control rods in the reactor was discovered last November. It said the defect has remained unsolved, because the device's maker in Ibaraki Prefecture was affected by the March 11th disaster.

The power company said it would be difficult to gain local understanding for starting the commercial operation of the new reactor without solving these problems.

It gave no timetable for the start of the operation, citing a lack of a work schedule.

Tuesday, May 31, 2011 19:57 +0900 (JST)

●Guidelines set for rumor damage compensation

A government panel reviewing compensation for the Fukushima Daiichi nuclear plant accident has set guidelines on payments for so-called rumor-induced damages and mental suffering of evacuees.

According to a directive hammered out on Tuesday, farming, fishing and tourist industry claimants are eligible to be compensated in cases where radiation rumors are confirmed to have caused loss of business income.

Rumor-induced damages are defined as losses incurred due to consumers not buying goods and services, or clients canceling transactions, whether due to rumor-based fears or to avoid real risk. This is because the difference between the two reasons is difficult to determine.

The guidelines say all edible farm and marine products from areas where shipments have been banned could be covered by compensation.

Loss of income from reduced trade and price drops, as well as fees for radiation checks demanded by the purchaser, could be counted as damage.

For tourism, the guidelines say only businesses based in Fukushima Prefecture are eligible for compensation over canceled reservations. But the panel has yet to determine how to calculate the amount of payments.

Guidelines for other industries and regions will be set after further analysis.

The panel also says evacuees forced to spend long periods outside their homes may be compensated for mental suffering. It had initially agreed to divide damages into 4 stages depending on where the evacuees were placed. But it backtracked after local governments complained of unfairness.

In April, the panel filed damages guidelines for people who were forced to evacuate by government order from around the Fukushima Daiichi nuclear plant.

Tuesday, May 31, 2011 19:39 +0900 (JST)

End