

# 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. 91: 18:00, May 24**

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

(Fukushima NPP site)

- **TEPCO still looking into emergency cooling system**
- **Meltdowns also at No.2, No.3 reactors**
- **Heat exchangers to be installed at No. 2 reactor**
- **Contaminated water removal to be suspended soon**

(Other News)

- **Govt to set up panel to probe Fukushima accident**
- **Kan to talk nuclear safety at G8**
- **Panel to determine damage guidelines**
- **Parents demand lower radiation limit for children**
- **Companies in no-go zone begin radiation checks**
- **SDP wants nuclear power plants scrapped by 2020**

# Earthquake Report - JAIF

## ●TEPCO still looking into emergency cooling system

The operator of the Fukushima Daiichi nuclear power plant is still unable to determine how long an emergency cooling system at the Number 1 reactor remained off after the March 11 earthquake.

Officials of Tokyo Electric Power Company spoke to reporters on Tuesday about the system, which can function without external sources of power.

Operating records at the plant show that the system turned on automatically 6 minutes after the earthquake, at 2:52 PM, and halted 11 minutes later, at 3:03 PM. The system was back on more than 3 hours later, at 6:18 PM.

TEPCO says that based on hearing from workers, it has confirmed that the system was manually shut down at 3:03 PM.

It said this step was made based on a manual, in order to prevent damage to the reactor, because the temperature of the water to cool the No.1 reactor had dropped sharply.

TEPCO says the system may have been turned on in the 3 hours until 6:18, but that it cannot clearly determine the course of events based on studies of circuits and interviews with workers.

The utility firm says at this point it cannot determine to what extent the emergency system was functioning, and that it will continue investigating.

The firm also said that data taken in the 30 minutes after the earthquake show no irregularities in all safety features of the Number 1 to 3 reactors such as emergency power sources and in major facilities of the plant.

On May 16th, TEPCO disclosed the plant's operating records from immediately after the earthquake. The Nuclear and Industrial Safety Agency has instructed the firm to submit a report after analyzing them further and assessing their effects on nuclear safety.

Tuesday, May 24, 2011 14:00 +0900 (JST)

## ●Meltdowns also at No.2, No.3 reactors

The operator of the crippled Fukushima Daiichi nuclear plant says findings show that fuel meltdowns may have occurred at the No.2 and No.3 reactors within days of the March 11th earthquake. But it says both reactors are now stable at relatively low temperatures.

Tokyo Electric Power Company said earlier this month that fuel rods at the plant's No.1 reactor had melted.

The utility says a cooling system failure at the No.2 reactor 3 days after the quake led to a sharp drop in its water level.

Workers tried pumping in water from a fire engine, but the injection wasn't enough and the fuel rods likely became exposed.

Most of the fuel is thought to have melted down and collected at the bottom of the reactor pressure vessel by 8 PM on March 15th. That's about 101 hours, or 4 days, after the earthquake.

At the No.3 reactor, TEPCO says the fuel could have reached a state of meltdown at around 3 AM on March 14th, about 60 hours after the quake.

However, TEPCO says there is still a chance the damage to the fuel rods is limited.

# Earthquake Report - JAIF

It says if the water gauges inside the 2 reactors are accurate, their readings show there were sufficient levels of water in the pressure vessels to prevent a total meltdown.

Tuesday, May 24, 2011 11:38 +0900 (JST)

## ●Heat exchangers to be installed at No. 2 reactor

The operator of the Fukushima Daiichi nuclear power plant will install 2 heat exchangers at the Number 2 reactor building on Tuesday to lower the temperature of the spent fuel pool.

Last Wednesday, Tokyo Electric Power Company workers entered the reactor building to check radiation levels. But high humidity prevented them from staying longer than 14 minutes.

The humidity is thought to stem from the high temperature of the spent fuel pool and steam from the suppression pool which may have been damaged by explosions after the March 11th earthquake and tsunami.

TEPCO plans to reduce the humidity by installing exchangers in the building next to the reactor.

The utility says it hopes to start using the exchangers this month to reduce the pool's temperature from around 80 degrees Celsius to about 40 degrees Celsius within a month.

TEPCO hopes to install exchangers at the No. 1 and 3 reactors next month and at the No. 4 reactor in July.

Tuesday, May 24, 2011 07:05 +0900 (JST)

## ●Contaminated water removal to be suspended soon

The operator of the damaged Fukushima nuclear power plant is continuing the transfer of highly radioactive water from 2 reactor buildings to storage facilities within the compound, but the facilities are expected to become full within 3 or 4 days.

About 47,000 tons of contaminated water has accumulated in the turbine buildings and utility tunnels, hampering Tokyo Electric Power Company's efforts to bring the plant under control.

TEPCO is pumping a total of 14,000 tons of such water from the Numbers 2 and 3 reactors to the storage facilities. But one of the facilities is expected to reach its capacity in 3 days and the other in 4 days, forcing the transfer to be suspended.

TEPCO says it is studying whether it is possible for the storing facilities to accept additional radioactive water for the time being, until it starts operating a new facility.

The new facility is designed to lower the radiation level of the contaminated water on a full-fledged basis, and then use the water to cool the reactors. The facility is expected to be completed by mid-June.

The utility says the levels of the remaining contaminated water at the 2 reactors remain almost unchanged and that there is no immediate risk that the radioactive water will leak into the ground or the sea. TEPCO says it is monitoring operations closely to prevent any leaks.

TEPCO reported that it had discovered contaminated water leaking into the sea

# Earthquake Report - JAIF

in April, and again earlier this month. The utility has since taken measures to prevent further leaks.

Monday, May 23, 2011 19:25 +0900 (JST)

## ●Govt to set up panel to probe Fukushima accident

The Japanese government has decided to set up a panel to investigate the accident at the Fukushima Daiichi nuclear power plant.

At a news conference on Tuesday, Deputy Chief Cabinet Secretary Yoshito Sengoku announced that the investigation and verification committee will be headed by Yotaro Hatamura, Professor Emeritus at the University of Tokyo.

The 70-year-old Hatamura has been involved in probing serious accidents, including a 2005 train derailment where 106 passengers and driver were killed. He advocates "failure science" -- learning from past failures to prevent recurrences.

Sengoku added that as many panel members as possible will be chosen among people who have not worked in atomic power related fields, in order to carry out an impartial investigation.

The panel is to compile an interim report by the end of the year.

Sengoku says Tokyo Electric Power Company, related administrative organizations, Prime Minister Naoto Kan and other cabinet members will be subject to investigation without exemption.

Tuesday, May 24, 2011 14:00 +0900 (JST)

## ●Kan to talk nuclear safety at G8

Prime Minister Naoto Kan will leave for France on Tuesday to attend the G8 summit where he is expected to discuss nuclear safety.

The meeting will be held in Deauville, Normandy on May 26th and 27th. Deputy Chief Cabinet Secretary Tetsuro Fukuyama told NHK that the prime minister will emphasize the country's readiness to disclose information about events at the Fukushima Daiichi plant.

Fukuyama also said the prime minister will explain Japan's new energy policy, which increases its focus on renewable energy and energy saving.

Kan plans to meet French President Nicolas Sarkozy and US President Barack Obama on the sidelines of his 6-day visit to Europe.

Kan will also meet leaders of the EU to discuss the launch of negotiations on an economic partnership agreement.

Tuesday, May 24, 2011 07:05 +0900 (JST)

## ●Panel to determine damage guidelines

A state panel drawing up a framework for compensation over the ongoing crisis at the crippled Fukushima Daiichi nuclear power plant has heard from various industries on damage caused by unfounded rumors about the risks of radiation.

The panel will compile as early as next week its 2nd set of guidelines on various types of damage, including that caused by such unfounded rumors.

# Earthquake Report - JAIF

In its fifth meeting on Monday, the panel heard from representatives of several industrial sectors, including farming, fishing, tourism and construction.

Representatives of the hotel industry said groundless rumors have forced tourism businesses in Fukushima Prefecture to suspend operations or close down.

They added that the number of tourists from overseas has dropped significantly outside Fukushima as well.

The construction industry pointed out that firms were asked by leasing companies to buy leased construction machinery or make the leases permanent, because the machinery had been contaminated by radiation.

Panel members said it is necessary to determine whether hotel cancellations were prompted by rumors about the nuclear accident, or whether people opted against traveling out of consideration for the victims of the March 11th quake and tsunami.

The panel will compile the guidelines by its next meeting on the 31st of this month if things go smoothly.

Monday, May 23, 2011 23:16 +0900 (JST)

## ●Parents demand lower radiation limit for children

A group of parents of school children is calling for lowering the government-set radiation limit for children.

The group is from Fukushima Prefecture, where a crippled nuclear power plant is posing the danger of nuclear contamination.

On Monday, members of the group visited the education ministry and submitted a petition bearing more than 15,000 signatures.

After the Fukushima Daiichi nuclear plant accident, the government set the yearly limit for accumulated external radiation for children undertaking outdoor activities at 20 millisieverts.

The parents have been pointing out that the government safety level is too high for children and are demanding that it be lowered to 1 millisievert per year.

One millisievert per year is the level recommended by the International Commission on Radiological Protection as a long-term annual reference level for humans.

The parents say the government should take as many measures as possible to reduce children's radiation exposure, such as removing contaminated topsoil from schoolyards.

A ministry official admitted that the 20-millisievert yearly level is not necessarily an appropriate limit for children. The official told the group that the ministry wants to consider all possible measures to reduce radiation risk.

Monday, May 23, 2011 21:29 +0900 (JST)

## ●Companies in no-go zone begin radiation checks

Companies in a village near the Fukushima Daiichi nuclear plant that have been granted permission to continue operations have begun daily monitoring of their workplace radiation levels.

The government expanded the 20-kilometer evacuation zone around the plant last month, due to the risks associated with long-term radiation exposure. Residents of Iitate Village, 30 kilometers northwest of the plant, must evacuate by the end

# Earthquake Report - JAIF

of May.

But the government has allowed 9 companies in the village to continue operations on the condition that they monitor and report their workers' exposure to radiation.

A local precision equipment maker began conducting worker radiation checks on Monday.

Some 60 employees received instructions on how to use a radiation dosimeter. They then measured and recorded their radiation levels.

The company's workers are to take exposure readings on a daily basis before going home from work.

The company says it is also using various strategies to reduce the amount of radioactive matter that enters the factory, such as keeping windows closed and moving outdoor air conditioning units above the ground.

Monday, May 23, 2011 18:09 +0900 (JST)

## ●SDP wants nuclear power plants scrapped by 2020

The opposition Social Democratic Party is proposing that Japan should scrap all nuclear power plants by 2020.

It says domestic electricity needs can be fully covered by natural energy sources by 2050.

The Social Democrats have put together an action plan for changing the country's energy policy.

The party says some of the 54 reactors in Japan are at risk of being damaged by earthquakes and tsunami or have already exceeded their lifespan of 40 years. It says they will all have to be shut down by 2020.

The SDP says the government should promote solar power, hydropower and other natural sources of energy through deregulation.

The opposition party suggests that utility firms should separate generation and distribution as part of the deregulation measures.

The SDP says that alternative energy sources should be able to supply Japan's electricity needs by 2050.

It says the supply and demand imbalance during the transition period can be made up for with existing thermal and hydraulic power facilities.

The Social Democratic Party says it will soon present the plan to the government to push for a shift in energy policy.

Monday, May 23, 2011 15:24 +0900 (JST)

End