# 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 I am happy to say that NHK's English website has gotten enriched and 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 later, rather than summarizing news as we did.

#### No. 35

Today's NHK news regarding status of Fukushima Daiichi nuclear power station as of 12:00 on March 29

● Tokyo Electric Power Company says plutonium has been found in soil samples from the Fukushima Daiichi nuclear power plant.

It says the radioactive substance appears to be related to the ongoing nuclear accident, but the level detected is the same as that found in other parts of Japan and does not pose a threat to human health.

TEPCO collected samples from 5 locations around the power plant over 2 days from March 21st and found 2 samples contaminated with plutonium.

Plutonium is a byproduct of the nuclear power generation process. At the number 3 reactor of the Fukushima plant, plutonium is an ingredient in mixed oxide, or MOX, fuel.

Radioactivity from plutonium can be shielded by a sheet of paper. But it can remain in lungs and other organs to cause long-term damages including cancer. The Nuclear and Industrial Safety Agency says the detected level is the same as that found in the environment and not health-threatening for workers who conducted the sampling, nor residents in surrounding areas.

The agency said it is awaiting the results of another survey by the Science Ministry outside of a 20-kilometer radius from the plant, as well as a further survey by TEPCO in the plant compound.

Tuesday, March 29, 2011 02:20 +0900 (JST)

### ●TEPCO faces challenge in cooling reactor

The Nuclear and Industrial Safety Agency said on Monday that TEPCO has to strike a balance between injecting cooling water into the reactors and preventing radioactive water from seeping out.

On Monday, the power company detected radiation of more than 1,000 millisieverts per hour on the surface of puddles in the No. 2 reactor's turbine building and in a trench outside the building.

The concrete trench stretches toward the coast but does not connect to the sea. Puddles of water were also found in the trenches of the No.1 and No.3 reactors.

The No.1 reactor's trench will overflow if the water rises by 10 centimeters. TEPCO has blocked the trench outlet with sandbags and concrete to prevent the water from reaching the ocean.

The water in the trenches of the No.2 and No.3 reactors is reportedly 1 meter from overflowing.

## Earthquake Report - JAIF

TEPCO said it hopes to swiftly find a way to remove the water from the trenches.

On Monday, The power company scaled back its operation to cool the No. 2 reactor, injecting 7 tons per hour, reduced from 16. The reactor's temperature rose by more than 20 degrees Celsius.

Tuesday, March 29, 2011 08:03 +0900 (JST)

### **●**Radioactive water in external tunnels

The operator of the damaged nuclear power plant in Fukushima, northeastern Japan, has reported that very high levels of radiation have been observed in water in a trench just outside the turbine building for one of the reactors.

Tokyo Electric Power Company announced on Monday that a puddle of water was found in a trench outside the No. 2 reactor turbine building at the Fukushima Daiichi nuclear plant on Sunday afternoon. It said the radiation reading on the puddle's surface indicated more than 1,000 millisieverts per hour.

The concrete trench is 4 meters high and 3 meters wide and houses power cables and pipes. It is located in the compound of the plant but outside the radiation control area.

TEPCO says the trench extends 76 meters toward the sea but does not reach the sea, and that the contaminated water was not flowing into the sea.

TEPCO says it is trying to find out how the contaminated water came to be in the trench.

Radiation levels of more than 1,000 millisieverts per hour were recorded on Sunday in a puddle of water in the basement of the No. 2 reactor turbine building. Puddles of water were also found in the trenches outside the No. 1 and No. 3 reactors. TEPCO reported 0.4 millisieverts of radiation on the surface of the puddle in the No. 1 reactor's trench. But it said it failed to measure the No. 3 reactor's trench because it was covered with debris.

TEPCO says it had no intention of concealing data regarding the high level of radiation detected on Sunday outside a turbine building at its Fukushima Daiichi nuclear plant.

TEPCO Vice President Sakae Muto said at a news conference on Monday that he only received the report from the plant workers earlier in the day.

The plant operator has revealed that it found water in a covered tunnel outside the turbine building of the number 2 reactor, and that radiation of more than 1,000 millisieverts per hour was detected in the water.

Muto said the company has made this public and instructed the plant workers to quickly take steps to dispose of the water.

Asked by reporters if TEPCO was concealing information, Muto said the company has no intention of doing so.

He also said every day is full of events, and that TEPCO will quickly share information of high importance so that it can swiftly consider countermeasures.

Vice President Muto added that the plant operator will confirm the flow of information and have it thoroughly implemented in order to avoid misunderstandings.

Tuesday, March 29, 2011 02:21 +0900 (JST)

# Earthquake Report - JAIF

### **Radiation hampers cooling efforts**

The effort to cool reactors at the damaged nuclear power plant in Fukushima, northern Japan, is facing the risk of leaking highly radioactive substances.

The plant's operator, Tokyo Electric Power Company, raised water pumping power on Sunday to cool the No. 2 reactor in a stable manner. On Monday, the company cut back on the amount of injected water.

The move followed the Nuclear Safety Commission's announcement that highly radioactive substances detected in puddles of water in the basement of the reactor's turbine building may have come directly from the vessel containing the reactor.

16 tons of water was being injected into the reactor every hour but TEPCO now says it wants to reduce the amount to 7 tons. This would be enough to replace the amount that is evaporating.

If the injected water level is reduced, temperatures may increase in the reactor.

TEPCO announced on Monday that radioactive substances 100,000 times higher than usual for water in a reactor core were detected in puddles in the No. 2 reactor's turbine building on Sunday.

High radiation figures were also recorded earlier in water in the basements of the turbine buildings for the No. 1 and No. 3 reactors. On Thursday, 3 workers were exposed to high radiation while working in water at the No. 3 reactor's turbine building.

The Nuclear Safety Commission said on Monday that the concentration of radiation at the No. 2 reactor was dozens of times higher than the other 2 reactors. The commission said it assumes that radioactive substances from temporarily melted fuel rods at the No. 2 reactor had made their way into water in the reactor containment vessel and then leaked out through an unknown route.

TEPCO, later, reported that very high levels of radiation have also been observed in water in a trench just outside the turbine building for one of the reactors.

The commission said the biggest concern is the possibility of highly radioactive water seeping into the ground and the ocean. It added that all-out efforts should be made to prevent contaminated water from leaking and called on the government to intensify monitoring radiation levels in the ground water and seawater.

Monday, March 28, 2011 22:38 +0900 (JST)

End