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. 45: 20:00, April 7

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

●Japan's FM official criticizes foreign media

A high official of Japan's Foreign Ministry has criticized foreign news media coverage of the problems at the Fukushima Daiichi nuclear plant, saying that some of the reports have been exaggerated and excessive.
State Secretary for Foreign Affairs, Chiaki Takahashi, was talking to reporters at a news conference on Thursday.
He also said that he has urged foreign news organizations, via Japanese embassies, to provide objective and cool-headed coverage and to make corrections to reports if necessary.
But Takahashi added that he can understand the concerns of foreign countries over recent developments at the nuclear plant, including the radioactive contamination of seawater.
He said Chief Cabinet Secretary Yukio Edano has instructed his ministry to do more to give foreign diplomats detailed explanations of what is taking place.
Thursday, April 07, 2011 17:29 +0900 (JST)

●Moving radioactive water likely to take long time

Japan's nuclear agency says moving highly radioactive water from the Fukushima Daiichi power plant's turbine building to a storage facility may not start for another week.
The water in the basement of the turbine building of the plant's Number 2 reactor and a concrete tunnel has been hampering work to restore the reactor's cooling systems.
The plant's operator, Tokyo Electric Power Company, has been discharging lower-level radioactive water into the sea from the facility to make room for the highly radioactive water. The work is to end on Thursday.
But the government's Nuclear and Industrial Safety Agency says the facility must first be checked for cracks that might have been caused by the earthquake, and that this could take several days to a week.
The agency says the facility was designed to store low-level radioactive water, and that every effort must be made to make sure that highly radioactive water does not leak.
Thursday, April 07, 2011 17:11 +0900 (JST)

●Daily radiation checks on fish begin in Ibaraki

The Japanese government has begun monitoring radiation levels in fish in the Pacific off Ibaraki Prefecture, which is located south of the crippled Fukushima Daiichi nuclear power plant.

A trawler left Nakaminato Port at Hitachinaka City in the prefecture on Thursday to catch fish such as plaice and anglerfish as test samples.

The daily checks follow the detection of radioactive cesium above the legal limit in small fish called sand lance. The fish were caught Monday in seas off northern Ibaraki Prefecture, which is nearer to the nuclear plant.

Radiation exceeding the limit has not been found in other fish so far. But all fishing off the Ibaraki coast has been suspended because brokers and retailers are refusing to buy fish from the area.

Nakaminato fisheries cooperative official Kazumi Nemoto says the checks are necessary to confirm the safety of fish off Ibaraki so that consumers can eat them without worry.

Thursday, April 07, 2011 16:19 +0900 (JST)

●Radiation level remains high after leak stopped

At the crippled Fukushima Daiichi nuclear power plant, radiation in seawater near the Number 2 reactor remains high, even after the leakage of contaminated water into the sea was stopped.

The plant operator, Tokyo Electric Power Company, said it had confirmed early Wednesday morning that highly contaminated water was no longer leaking from a concrete pit after workers injected a hardening agent beneath it.

The company says it detected 5,600 bequerels of radioactive iodine-131 per cubic centimeter in seawater samples collected around the water intake of the reactor at 7:40 AM local time on Wednesday.

That's about half the level detected on the previous day, but still 140,000 times higher than the safety limit under the government's standards.

On Tuesday, the measurement at the same spot was 11,000 bequerels, 280,000 times higher than the standard.

Levels of iodine-131 at this spot have been alarmingly high since April 2nd, when Tokyo Electric detected 7.5 million times higher than permissible levels of the radioactive substance.

Tokyo Electric said it's too early to determine whether the decrease is a result of stopping the leak.

Thursday, April 07, 2011 14:52 +0900 (JST)

●Nuclear evacuation zone may be expanded

The Government says it may order residents of some areas within 20 to 30 kilometers of the troubled Fukushima Daiichi nuclear power plant to evacuate.

Residents within 20 kilometers of the plant have been evacuated, while those living between 20 to 30 kilometers have been advised to remain indoors.

Chief Cabinet Secretary Yukio Edano told reporters on Thursday that existing evacuation guidelines assume large amounts of radiation being released over a short period of time and are not relevant in considering the impact of long-term exposure.

He said that total exposure to radiation is high in some areas in the 20-30

kilometer zone as the accident drags on.
Edano said the nuclear safety agency is studying whether to order residents of those areas to evacuate.
The Chief Cabinet Secretary also said the government wants to allow evacuees to return temporarily to their homes to gather valuables and necessities as requested, but is still studying safety issues.
Thursday, April 07, 2011 14:07 +0900 (JST

●TEPCO: Nitrogen injection going well

The operator of the crippled Fukushima Daiichi nuclear power plant says it continues to inject nitrogen gas into the containment vessel of the No.1 reactor without problems. The nitrogen gas is being used to prevent a hydrogen blast at the reactor.
The Tokyo Electric Power Company, or TEPCO, says that as of 6 AM Thursday pressure inside the containment vessel of the No.1 reactor had risen only slightly and that this indicates the operation is going well. The gas injection began at 1:30 AM Thursday.
Fuel rods inside the No.1 reactor are nearly half exposed because coolant water levels remain low. It is thought that the overheated fuel rods have caused a buildup of the volatile mix of hydrogen and oxygen. It is hoped the chemically stable nitrogen will counteract this buildup.
TEPCO says it plans to continue the injection for about 6 days and will also consider taking similar measures at the No. 2 and No. 3 reactors.
Regarding another problem, TEPCO said the pool of highly contaminated water in the underground tunnel connected to the No. 2 reactor rose 5 centimeters in the 24 hours leading up to 7 AM Thursday.
TEPCO says the rise is probably related to stopping the leakage of highly radioactive water from a concrete pit of the No. 2 reactor with the use of a hardening agent on Wednesday.
The company says there is still one meter of room to ground level, but will keep a close watch on the situation because an overflow would seriously hamper the already difficult restoration work.
TEPCO is also continuing the release of 8,000 tons of low-level radioactive wastewater from the plant to make storage space for more highly contaminated water. Around 6,000 tons have been discharged so far.
Thursday, April 07, 2011 12:09 +0900 (JST)

●IAEA experts discuss nuclear safety

Experts with the International Atomic Energy Agency have discussed safety measures at Japan's nuclear plants and its response to the crisis in Fukushima.
Some 200 nuclear experts from around the world held a three-day meeting in Vienna that ended on Wednesday. They discussed the continuing crisis at the Fukushima Daiichi nuclear plant, which was heavily damaged by the March 11th earthquake and tsunami.
The deputy director general of Japan's Nuclear and Industrial Safety Agency, Koichiro Nakamura, explained that Japan tightened quake-resistance standards after the earthquake in Niigata Prefecture 4 years ago, which resulted in radioactive substances leaking from a nuclear plant on the Sea of Japan coast.

Tokyo Electric Power Company operates both plants in Fukushima and Niigata.
He added that the government has ordered power companies in Japan to deploy emergency generator trucks at their nuclear plants, after generators at the Fukushima plant were destroyed by tsunami waves.
Foreign experts asked about tsunami preparedness at Japan's nuclear plants, and expressed concern over its decision to release radioactive waste into the sea.
Thursday, April 07, 2011 11:20 +0900 (JST)

●Evacuation standards being reviewed

Nuclear experts are suggesting the government revise the radioactive standards for evacuation advisories involving the emergency at the Fukushima Daiichi nuclear power plant.
The move comes almost 4 weeks after tsunami disabled the nuclear plant.
According to existing guidelines, people should remain indoors when radiation levels outdoors reach 10 millisieverts several days after any accident. Evacuation is only considered when levels reach 50 millisieverts. The guidelines were set by the Nuclear Safety Commission using standards adopted by organizations including the International Atomic Energy Agency.
The government has advised residents living in areas within 20 kilometers of the Fukushima Daiichi nuclear power plant to "evacuate" while those in areas between 20 and 30 kilometers have been told to "stay indoors".
However, the amount of exposure is likely to rise in these areas as little progress has been made in cooling the nuclear fuels or containing radiation leaks.
Taking into consideration the fact that the situation may be prolonged, the Nuclear Safety Commission has reviewed its guidelines using a 2007 advisory issued by the International Committee on Radiological Protection. The commission now says an evacuation advisory should be issued to prevent residents from being exposed to a total of 20 millisieverts a year.
A member of the commission says the evacuation advisories should reflect the possibility that the situation at the nuclear power plant will be drawn out.
According to the member, the Commission has suggested to a task force that measures should be taken when radiation levels exceed 20 millisieverts. The member says it is the Commission's responsibility to monitor and collect data in each affected area.
Scientists say the limit allowed for an average person is 1 millisiervert a year. The Nuclear Safety Commission is suggesting revising the evacuation standard only for the current emergency. It says it does not necessarily mean that the 1-millisievert limit should be raised. The commission says the government has already begun briefing the affected local communities on the matter.
Thursday, April 07, 2011 06:48 +0900 (JST)

●Nitrogen gas injection begins at Fukushima plant

The operator of the disabled Fukushima Daiichi nuclear power plant says it has begun injecting nitrogen gas into the containment vessel of one of the reactors.
Tokyo Electric Power Company says the injection is aimed at preventing hydrogen from exploding inside the containment vessel at the No. 1 reactor.
The fuel rods remain nearly half exposed as the coolant water inside the reactor has not yet risen high enough. It is thought that hydrogen and oxygen have been

generated as a result of the reaction between water and the zirconium alloy that covers the fuel. Hydrogen can also be generated when radiation dissolves water molecules.
If the density of hydrogen inside the containment vessel increases, it will heighten the risk of explosion through a reaction with oxygen.
Nitrogen gas does not react with hydrogen and is chemically stable.
Work to inject nitrogen gas into the reactor containment vessel began at 10:30 PM on Wednesday, and the actual injection began a little after 1:30 AM on Thursday.
TEPCO says the injection will continue for 6 days. The company is also considering making similar injections in the No 2 and No3 reactors.
The Nuclear and Industrial Safety Agency warns that the nitrogen gas injection could cause gases including radioactive substances to leak outside the reactor containment vessel.
It says it has instructed TEPCO to monitor radioactivity in surrounding areas and to fully disclosure any information.
The Fukushima Daiichi nuclear power plant was damaged by the earthquake and tsunami that hit eastern Japan on March 11th. On the following day, hydrogen that accumulated in the building that houses the No. 1 reactor exploded, blowing off its roof and walls. Two days later, a similar hydrogen blast occurred at No. 3 reactor.
Thursday, April 07, 2011 02:07 +0900 (JST)

●Radiation levels in seawater remain high

The operator of the troubled Fukushima Daiichi nuclear power plant says radiation levels detected in seawater near the plant remain high.
Tokyo Electric Power Company says it detected 11,000 bequerels of radioactive iodine-131 per cubic centimeter in seawater samples collected around the water intake of the No.2 reactor on Tuesday morning.
That's 280,000 times higher than the maximum allowed under the government's standards.
The recorded radioactive concentration was still high even though it was lower than that of last Saturday, when 7.5 million times the legal limit was detected at the same spot.
The utility also detected 24 bequerels of iodine-131 per cubic centimeter, about 600 times higher than the legal limit, in samples taken near the water outlet of the No.5 and No.6 reactors on Tuesday. The figure was higher than that of the previous day.
At a location about 330 meters south of the water outlet of the 4 reactors, the iodine-131 concentration had fallen from 4,385 times the legal limit detected last Wednesday to 400 times the legal limit, or 16 bequerels per cubic centimeter on Tuesday.
Wednesday, April 06, 2011 21:50 +0900 (JST)

Earthquake Report - JAIF

●Plutonium detected again in Fukushima plant soil

Tokyo Electric Power Company has again detected a very small volume of plutonium in soil samples from the disaster-stricken Fukushima Daiichi nuclear power plant.

The operator of the plant collected samples from 4 locations at the compound of the plant on March 25th and 28th for analysis by an outside organization.

The utility says the radioactive substance was detected on the soil about 500 meters west-northwest of the No.1 reactor and a site near a solid waste storage facility 500 meters north of the reactor.

The first sample measured 0.26 becquerels of plutonium-238 per 1 kilogram of soil, down about 50 percent from the volume found earlier.

Highly toxic plutonium, a byproduct of the nuclear power generation process, was also found at the same locations in samples collected on March 21st and 22nd.

The plutonium appears to be related to the ongoing nuclear accident. TEPCO says the volume is so small that it does not pose a threat to human health.

This level is almost the same as the amount usually in the Japanese soil and also about the same the level of fallout from nuclear tests in the atmosphere outside Japan.

TEPCO says the No.3 reactor at the Fukushima plant was powered with uranium-plutonium mixed-oxide fuel.

But the company says that it cannot identify which reactor released the plutonium, because plutonium is produced at other reactors using uranium fuel.

Wednesday, April 06, 2011 21:50 +0900 (JST)

●Workers face challenge of water storage

Workers struggling to control the damaged Fukushima Daiichi nuclear plant face the challenge of storing huge amounts of radioactive wastewater found throughout the facility.

The Tokyo Electric Power Company, or TEPCO, says at least 50,000 tons of wastewater contaminated with highly radioactive material has pooled in reactor turbine buildings and outdoor trenches.

The water has been hampering efforts to restore reactor cooling systems, raising fears that it will leak out and further pollute the sea.

TEPCO has been working to determine where the contaminated water can stored safely.

One option is the plant's turbine condensers, which convert steam into water. Another is a processing facility for nuclear waste from the plant's No. 1 through 4 reactors. TEPCO also plans to construct makeshift water tanks. It says that using all three options, it should be able to store more than 60,000 tons of wastewater.

But about 500 tons of fresh water is injected into reactor buildings each day to cool down the reactors. Some of the water is believed to be leaking outside after becoming contaminated.

This means the total amount of radioactive wastewater in the compound could exceed the currently estimated 50,000 tons, requiring more storage space.

Wednesday, April 06, 2011 19:50 +0900 (JST)

Earthquake Report - JAIF

●TEPCO to inject nitrogen into No.1 reactor

The operator of the disaster-damaged Fukushima Daiichi nuclear power plant is to inject nitrogen gas into the containment vessel of the No.1 reactor, as early as Wednesday, in a bid to avoid a possible hydrogen explosion.

Tokyo Electric Power Company, or TEPCO, cites the possibility that hydrogen and oxygen generated by damaged fuel and radiation-decomposed water have accumulated in the vessel.

A high concentration of hydrogen could cause an explosion through a reaction with oxygen.

Last month's hydrogen blasts at the No.1 and No.3 reactors destroyed reactor buildings, causing leaks of radioactive steam from the plant.

TEPCO plans to infuse a total of 6,000 cubic meters of nitrogen gas during a 6-day period. The utility company is now checking procedures with the government.

TEPCO says such work requires caution, as an injection of nitrogen gas could cause leaks of radioactive steam and gas from the containment vessel.

Wednesday, April 06, 2011 18:52 +0900 (JST)

●Radioactive water leak stops

Tokyo Electric Power Company, or TEPCO, says it has stopped radioactive water leaking from a concrete pit outside the No.2 reactor at the troubled Fukushima Daiichi nuclear plant.

On Tuesday, the plant operator drilled a hole into a layer of gravel around the pit, and poured a hardening agent called liquid glass, or sodium silicate, to stop the leak of highly radioactive water into the sea.

TEPCO says the flow was confirmed to have stopped on Wednesday morning, and that there has since been no change in the water level in the pit and the nearby turbine building.

Workers are looking for more possible cracks through which the water could leak out.

Meanwhile, TEPCO is continuing to release about 8,000 tons of wastewater contaminated with low-level radiation into the sea to make room in storage tanks for highly contaminated water. It says about 6,000 tons of water have already been released.

The company is also continuing to spray a synthetic resin solution on the plant's premises to prevent radioactive dust from becoming airborne.

Debris and dust contaminated with radioactive material have been scattered across the compound by a series of explosions at the No.1 through No.3 reactors.

On Wednesday, the resin solution was sprayed over a 300 square meter area around a pool for spent nuclear fuel.

Wednesday, April 06, 2011 18:51 +0900 (JST)

End