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 <a href="http://www3.nhk.or.jp/daily/english/society.html">http://www3.nhk.or.jp/daily/english/society.html</a>.

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. 51: 20:00, April 13

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

#### • Contaminated water level falls 4 cm

The operator of the crippled Fukushima Daiichi nuclear power plant says the level of contaminated water in the tunnel of the No. 2 reactor has dropped 4 centimeters.

Tokyo Electric Power Company says workers at the plant had moved about 250 tons of highly radioactive water from the tunnel into a turbine condenser by Wednesday morning.

It says that as a result, the water level had dropped by 4 centimeters to 95 centimeters below the surface as of 7 AM.

A series of aftershocks delayed the start of the work until after 7:30 PM on Tuesday. TEPCO says it is expected to take about 40 hours to move a total of 700 tons of contaminated water from the tunnel.

The company has been checking another storage facility for damage in order to use it for contaminated water from the basement of the reactor's turbine building. These efforts are aimed at allowing workers to restore the reactor's cooling system.

TEPCO also says it injected nearly 200 tons of water into the spent fuel storage pool at the No. 4 reactor early Wednesday.

It says an analysis of the water from the pool on Tuesday put the radiation level on the surface at 84 millisieverts per hour and the water temperature at around 90 degrees Celsius, higher than usual.

The company says it will try to identify radioactive substances in the water in the pool and their densities to determine whether the reactor's fuel has been damaged. Wednesday, April 13, 2011 12:47 +0900 (JST)

### • High radiation levels in sea off Fukushima coast

The science ministry says radiation levels in seawater off the coast of Fukushima Prefecture are the highest since it began monitoring them about 3 weeks ago.

The ministry says the level of iodine-131 was 88.5 becquerels per liter in a sample taken on Monday in the sea about 30 kilometers east of the Fukushima Daiichi nuclear plant. The figure is 2.2 times the government's upper limit for wastewater from nuclear facilities.

The level of cesium-137 was also the highest observed so far, but was below the

limit.

Tokyo Electric Power Company says the iodine-131 level was 23 times the upper limit in a sample taken 15 kilometers from the plant.

This was the highest figure since TEPCO began taking samples 15 kilometers offshore on April 2nd.

Radiation levels are higher in the sea to the north of the crippled plant.

The government's Nuclear and Industrial Safety Agency says radioactive substances seem to be flowing and diffusing northward.

The agency says predicting the course of the flow is difficult and it will step up monitoring in locations where high radiation levels have been detected.

Wednesday, April 13, 2011 09:04 +0900 (JST)

#### ■ Radioactive strontium detected outside 30km zone

Japan's science ministry says small amounts of radioactive strontium have been detected in soil and plants outside the 30-kilometer zone around the Fukushima plant where the government has advised people to stay indoors. Strontium could cause cancer.

The ministry has been monitoring the level of radioactive substances in soil and weeds in Fukushima Prefecture.

It found 3.3 to 32 becquerels of strontium 90 per kilogram of soil in samples taken from 3 locations in Namie Town and Iitate Village, 30 kilometers from the plant.

An extremely small amount of strontium was also found in plants taken from Motomiya City, Ono Town and Otama and Nishigo Villages. The areas are 40 to 80 kilometers from the Fukushima plant.

Strontium 90 has a half-life of 29 years. It tends to accumulate in bones and could cause cancer.

The ministry says the amount found is extremely low and will not have a negative health impact even if a person ingested one kilogram of the contaminated soil.

The samples were taken between March 16 and 19.

A nuclear engineering expert says the fact that strontium was detected proves that the fuel in the reactor or the spent fuel in the pool was damaged at that point. He says a hydrogen explosion occurred at Reactor 3 around that time and the particles may have been carried by winds.

Wednesday, April 13, 2011 07:52 +0900 (JST)

### ●IAEA: Fukushima very different from Chernobyl

The International Atomic Energy Agency has supported the Japanese government's analysis that the release of radioactive materials from the Fukushima Daiichi plant is on a smaller scale than the 1986 Chernobyl accident. IAEA Deputy Director General Denis Flory spoke to reporters in Vienna on Tuesday after the Japanese authorities raised the severity level of the Fukushima accident to 7 from 5. This is the highest rank on an international scale and the same level as the Chernobyl accident.

Flory said the accidents at Fukushima and Chernobyl are very different. He said that in Chernobyl the reactor exploded while in operation, but in Fukushima the reactors stopped when the earthquake hit and the pressure vessels housing them did not blow up.

Flory said the Japanese government has provided credible data to the IAEA. He supported Japan's analysis that the cumulative dose is about 10 percent of the one from the Chernobyl plant.

The UN nuclear agency says it will continue to analyze the radiation measurements by the Japanese authorities.

Wednesday, April 13, 2011 08:06 +0900 (JST)

#### • China demands information on nuclear crisis

Chinese Premier Wen Jiabao has urged Japan's leader to disclose all necessary information on the crisis at the Fukushima Daiichi nuclear power plant.

Wen spoke with Japan's Prime Minister Naoto Kan in a telephone conference on Tuesday for the first time since the March 11th disaster.

Kan expressed appreciation for China's aid following the disaster.

Wen said he thinks of the disaster as though it happened in China. He added China believes the Japanese government and people will overcome the current hardship and reconstruct the stricken areas.

Kan also pledged to maintain full transparency in providing information on the nuclear crisis.

Wen responded that China hopes the Japanese government will be able to contain the accident effectively.

Wen and Kan also agreed to strengthen cooperation on nuclear safety and disaster prevention measures, as next year will mark the 40th anniversary of the normalization of diplomatic ties between the 2 nations.

Tuesday, April 12, 2011 21:12 +0900 (JST)

#### **●**China wants accurate information on radiation

China has urged Japan to provide information accurately and swiftly regarding radioactive contamination caused by the accident at the crippled Fukushima Daiichi nuclear power plant.

Chinese Foreign Ministry spokesperson Hong Lei spoke to reporters on Tuesday, following Japan's announcement that the crisis level at the plant was raised to 7 -- the highest on an international standard.

Hong said China is looking at the announcement carefully.

Last Friday, China expanded its ban on imports of Japanese farm and marine products from 5 prefectures to 12, including Tokyo.

China's government says it will continue to monitor developments at the plant and radioactive contamination.

Tuesday, April 12, 2011 20:26 +0900 (JST)

#### ●IAEA calmly reacts to Fukushima plant's level 7

The International Atomic Energy Agency says it has been notified by Japan that it raised the crisis level at the crippled Fukushima Daiichi nuclear power plant to

7 -- the highest on an international scale.

In a statement released on Tuesday, the UN organization said Japan reevaluated the rating based on its estimate of the total amount of radioactivity released into the environment.

It said Japan's nuclear safety agency calculated that the amount of radioactive material released into the atmosphere is about 10 percent of that in the 1986 Chernobyl accident.

IAEA member countries are reportedly reacting calmly to Japan's decision to raise the level, due to a shared view about the seriousness of the accident based on information provided by Japan's government.

The members also reportedly knew that many international research organizations had said the accident should be assessed as a level-7 crisis.

Tuesday, April 12, 2011 20:15 +0900 (JST)

#### ● Japan, S.Korea discuss radiation safety

South Korea has expressed deep concern about Japan raising the severity of its nuclear disaster to the highest level on Tuesday.

South Korea's foreign ministry spokesperson told reporters in Seoul that the government is very sorry to see that the crisis is far from over. The rating of the accident at the Fukushima Daiichi nuclear plant was raised from 5 to 7, the worst on an internationally recognized scale.

The spokesperson disclosed that experts from Japan and South Korea started 2-days of talks in Tokyo on Tuesday about the radiation release from the Fukushima plant.

He said South Korea wants to obtain accurate information from Japan, as radiation fears are spreading among South Koreans, who have stopped buying marine products.

Tuesday, April 12, 2011 18:36 +0900 (JST)

### Overseas media make quick report on raising level

Overseas media were quick to report on Japan's raising of the severity of a nuclear accident at the crippled Fukushima Daiichi power plant to the worst level on an internationally recognized scale.

The AP news agency reported on Tuesday that Japan's authorities raised the level of the crisis to rank it on par with the 1986 Chernobyl disaster.

The Reuters news agency reported that the worst "level 7" rating reflects a serious situation that has continued since the outbreak of the accident, meaning that the situation has not suddenly become more critical.

The British broadcaster BBC, and US television network CNN also reported the rise in the level, live from Tokyo.

Tuesday, April 12, 2011 18:36 +0900 (JST)

#### **●**Edano: No need to change Fukushima response

Japan's top government spokesman says there will be no change in the way the crisis at the Fukushima Daiichi nuclear power plant is being handled.

Chief Cabinet Secretary Yukio Edano on Tuesday held his first news conference for the international media since the March 11th earthquake and tsunami.

Most questions from reporters focused on the government's decision to raise the severity level at the Fukushima plant to 7 from 5. Level 7 is the highest rank on an international scale and was also applied to the 1986 Chernobyl accident.

Edano stressed that raising the crisis level does not mean the situation is worsening. He said the upgrade was not due to a new emergency, but is based on the latest analysis of data.

A correspondent for a British magazine, the Economist, said Japanese ministers need to send more information to the world through foreign media outlets.

The correspondent said that politicians should have made more media appearances immediately after the disaster.

Wednesday, April 13, 2011 03:18 +0900 (JST)

#### ● Govt to do utmost to control Fukushima

Japan's industry minister says the government will do all it can to quickly put the crippled Fukushima Daiichi nuclear power plant under control.

Banri Kaieda was speaking to reporters on Tuesday after his ministry's nuclear safety agency raised the crisis level of the plant to 7 -- the highest level on an international scale.

Kaieda said the level is equivalent to that of the 1986 Chernobyl disaster, but that the volume of radiation from Fukushima is about one-tenth that at Chernobyl.

He added, however, that he fears the amount of radiation leaked into in the environment will increase, as workers at Fukushima have yet to stop the release of radioactive substances.

Tuesday, April 12, 2011 18:36 +0900 (JST)

#### **TEPCO** removing toxic water at Fukushima plant

Tokyo Electric Power Company is removing highly radioactive water at the crippled Fukushima Daiichi nuclear plant. The work had fallen behind schedule due to a series of aftershocks on Monday and Tuesday.

Workers started transferring the toxic water from a tunnel outside the Number 2 reactor to a turbine condenser on Tuesday evening. TEPCO estimates 6,000 tons of contaminated water has accumulated in the tunnel.

The company hopes to complete pumping 700 tons around Thursday noon. Workers will then begin removing toxic water from the reactor's basement.

Radioactive water flooding the tunnels and basements of the turbine buildings at Reactors 1 through 3 is getting in the way of restoring their cooling functions.

Separately, TEPCO has been injecting nitrogen gas into the Number 1 reactor containment vessel to prevent a hydrogen blast. But the pressure level inside hasn't gone up, suggesting that gases may be leaking outside. The company says it will monitor radiation levels around the plant.

The power company is also analyzing a water sample taken from Reactor 4's spent fuel pool on Tuesday. It says the water temperature was higher than usual at 90 degrees Celsius. Radiation around the pool was also high at 84 millisieverts per hour. TEPCO says it will pump water into the pool until it is full.

Wednesday, April 13, 2011 07:53 +0900 (JST)

#### **TEPCO:** 1% of radioactive iodine released outside

Tokyo Electric Power Company estimates that about one percent of the radioactive iodine at the Fukushima Daiichi nuclear power plant has been released since the March 11th earthquake and tsunami damaged the facility.

The company on Tuesday announced the estimated radioactivity levels of all substances at the plant's 6 reactors and fuel storage pools at the time of the disaster.

The estimates are classified under radioactive noble gases, iodine or other materials.

81 million tera-becquerels of iodine-131 are believed to have existed at the plant.

The utility says the amount of iodine-131 released outside the plant is about one percent of the total with a margin of error included.

The Nuclear and Industrial Safety Agency said earlier in the day that 130,000 tera-becquerels of iodine-131 have been released so far.

The company also says that, provided no leak occurred, the level of iodine-131 at the plant had fallen to less than one-hundredth of the pre-disaster level as of Monday.

The level declines naturally, as the radioactivity of iodine-131 falls by half in 8 days.

Wednesday, April 13, 2011 03:18 +0900 (JST)

### Removal of radioactive water begins

The operator of the crippled Fukushima Daiichi nuclear plant has begun work to remove highly radioactive water after a one-day delay due to a series of earthquakes since Monday.

Tokyo Electric Power Company started transferring radiation-contaminated wastewater from a tunnel outside the Number 2 reactor to a turbine condenser on Tuesday evening.

The radioactive water had been hampering work to restore cooling functions in the damaged reactors.

Earlier in the day, a quake with an intensity of six-minus on the Japanese scale of zero to 7 hit the plant.

The external power supply to the plant remained intact, and injection of water to cool the Numbers 1, 2 and 3 reactors continued.

Injection of nitrogen gas into the Number 1 reactor containment vessel to prevent a hydrogen blast has been continuing without any interruptions.

But the pressure level inside the container has remained flat over the past few days, suggesting that certain gases may be leaking out of the vessel. The power company says there has been no significant change in radiation levels around the plant.

On Tuesday morning, a fire broke out in a seawater sampling facility, but was put out about 7 minutes later.

The plant operator believes a battery short-circuited.

Tuesday, April 12, 2011 21:39 +0900 (JST)

#### • Kawamata residents briefed on planned evacuation

Officials of a town in Fukushima Prefecture have explained to residents an evacuation plan amid increasing risks of radiation released by the crippled Fukushima Daiichi nuclear power plant.

Kawamata Town Mayor Michio Furukawa met about 40 people living in the southeastern part of the town, which is in a newly-designated evacuation zone.

Japan's government on Monday expanded the zone to locations where annual exposure to radiation is expected to exceed 20 millisieverts.

Furukawa said the residents will be sheltered in public facilities in safe areas of the town and that temporary houses for evacuees will also be built.

A resident said the town should clarify how long the evacuation will last. Another said he will not leave his home until compensation is made for his livestock. Tuesday, April 12, 2011 20:51 +0900 (JST)

### ● TEPCO president apologizes for level-7 crisis

The president of the operator of the quake-damaged Fukushima Daiichi power plant says he is taking the decision by the government's nuclear safety agency seriously.

Masataka Shimizu, the head of Tokyo Electric Power Company, released the comment on Tuesday after the agency raised the crisis level of the accident to 7, the worst on the international scale of nuclear incidents.

He said he is deeply sorry for causing trouble and concern to nearby residents and people in Fukushima Prefecture, as well as to the public.

Shimizu said he wants to resolve the ongoing accident as soon as possible, adding that his company is trying to cool the crippled reactors down and prevent the dispersion of radioactivity.

He also said the company is considering various possible ways and steps to contain the nuclear crisis.

He added that his company will make all-out efforts to resolve the problem in close cooperation with the government, related ministries and municipalities.

Tuesday, April 12, 2011 20:15 +0900 (JST)

Aftershocks interrupt work at Fukushima plant

Work to put the crippled Fukushima Daiichi nuclear power plant under control has been repeatedly interrupted by a series of earthquakes since Monday.

On Tuesday, a quake with an intensity of six-minus on the Japanese scale of zero to 7 hit near the plant shortly after 2:00 PM local time.

External power supply to the plant remained intact, and injection of water to cool the Number 1, 2 and 3 reactors continued.

The plant's operator, Tokyo Electric Power Company, was due to use a hose to remove radiation-contaminated wastewater from a tunnel outside the Number 2 reactor to a turbine condenser on Monday.

But workers were unable to begin the process as of Tuesday afternoon, pending inspection of the hose for possible leaks.

Injection of nitrogen gas into the Number 1 reactor containment vessel to prevent a hydrogen blast has been continuing without any interruptions.

But the pressure level inside the container has remained largely flat over the past few days, suggesting that injected gas may be leaking out of the vessel.

The power company says there has been no significant change in radiation levels around the plant, and is continuing the procedure with caution.

On Tuesday morning, a fire broke out in a seawater sampling facility, but was put out about 7 minutes later.

The plant operator believes a battery short-circuited, and is looking for other possible fire hazards.

Tuesday, April 12, 2011 19:04 +0900 (JST)

End