Europe Solidaire Sans Frontières > English > Issues > Ecology (Theory) > Energy (nuclear) (Ecology) > Chernobyl (Ecology) > **Collapse of Chernobyl nuke plant building attributed to sloppy repair (...)**

Collapse of Chernobyl nuke plant building attributed to sloppy repair work, aging

Wednesday 8 May 2013, by Mainichi Shimbun (Date first published: 25 April 2013).

CHERNOBYL, Ukraine — A Ukrainian government fact-finding panel has compiled a report attributing the partial collapse of a building in the Chernobyl nuclear power complex in February to sloppy repair work following a 1986 explosion and the aging of the structure, it has been learned.

Moreover, the concrete and steel frame of a sarcophagus built to cover the troubled nuclear reactor shortly after the outbreak of the nuclear crisis has been deteriorating, according to a copy of the panel's interim report obtained by the Mainichi Shimbun.

The collapse of part of a turbine building for the No. 4 reactor on Feb. 12 backs up the concerns voiced by experts about the fragility of the aging structures of the nuclear complex.

Valentin Kupny, former deputy director of the nuclear plant, has warned that the complex is on the verge of collapsing, as April 26 marks the 27^{th} anniversary of the outbreak of the worst nuclear disaster in history. "The latest accident has suggested that the No. 4 reactor building is in an extremely dangerous situation," he said.

The No. 4 reactor, where an explosion occurred in 1986 and released a massive amount of radioactive substances into the environment, is now covered with a sarcophagus completed in the autumn of the same year.

A portion of the roof about 600 square meters in size and the walls of its neighboring turbine building collapsed on Feb. 12. The Ukrainian Emergency Ministry initially assumed that the structure collapsed under the weight of snow because the area had more snow this past winter than normal.

However, the fact-finding committee dismissed the view, and concluded in the interim report it compiled at the end of February that "the amount of snow did not exceed the assumed level. Several negative factors combined to cause braces to come off the roof."

Part of the turbine building of the No. 4 reactor was blown off by the explosion, and was repaired the following year.

The panel pointed to the possibility that the repaired part imposed a greater strain on the entire turbine building than expected and that corrosion and sloppy welding caused damage to the braces that fixed the roof to the structure.

The Ukrainian government plans to dismantle the No. 4 reactor building and the turbine building after completing a new metal shelter in 2015 to cover the sarcophagus and part of the turbine building.

However, Kupny expressed concerns that the whole structure is on the verge of collapsing. "If the completion of the new shelter is delayed, the structures (including the sarcophagus) could collapse."

Kupny said that when he was in charge of the plant from 1995 to 2002 he proposed that the roof of the turbine building should be reinforced by 2005. However, another senior official later chose not to do so because he underestimated the risk of it collapsing, which he claims led to the latest problem.

The panel's interim report also shows that radiation levels around the complex shortly after the Feb. 12 accident were up to 19 becquerels per cubic meter of air, more than 12 times normal levels. The report assumes that radioactive substances that had been released from the reactor and stayed inside the structure spread to surrounding areas after the collapse of the roof.

At the time of the collapse, 225 workers, including Chernobyl complex employees and those from a French company building the new shelter, were at the plant. Ordinary citizens are not allowed to enter areas within 30 kilometers of the plant. All of the workers fled the complex shortly after the collapse.

Following the accident, managers of the nuclear complex said radiation levels around the plant were at normal levels between 5 and 6 microsieverts per hour, and would not affect workers' health.

Kupny criticized the Chernobyl nuclear complex managers for trying to underestimate the seriousness of the Feb. 12 accident.

"The complex management is trying to convince the public that the amount of radiation released as a result of the latest accident was low, and has failed to disclose all information," he said. "The results of monitoring by an organization that has installed measurement devices on the premises of the plant suggest that areas around the power plant were contaminated with a certain level of radiation."

Mainichi Shimbun

P.S.

* Mainichi Shimbun, April 25, 2013 http://mainichi.jp/english/english/newsselect/news/20130425p2a00m0na017000c.html