Japan to set frequency limit for serious nuclear accidents

The Associated Press

TOKYO, April 3 (Kyodo) — The Nuclear Regulation Authority said Wednesday it plans to set a frequency limit for accidents resulting in large releases of radioactive substances of below one every million years per reactor.

The NRA has been discussing nuclear safety goals, saying it is important to be aware of the risks that will remain once planned measures are implemented, instead of reviving the nuclear "safety myth" that prevailed before the 2011 Fukushima Daiichi complex disaster.

During a meeting of NRA commissioners on Wednesday, Chairman Shunichi Tanaka said he hopes to compile the nuclear safety goals around next week, including the accident incidence limit.

The safety goals also include limiting the frequency of reactor core damage incidents to once every 10,000 years and cesium 137 releases to up to 100 terabecquerels even if radioactive substances need to be emitted to prevent critical damage to a reactor container.

One hundred terabecquerels is around a hundredth of the estimated amount of cesium 137 released during the Fukushima Daiichi crisis. The figure indicates that environmental contamination must be contained withing accident-stricken plants, according to the NRA.

One terabecquerel is equivalent to 1 trillion becquerels.

As part of the ongoing efforts to flesh out the country's new nuclear regulations after the Fukushima crisis, the NRA decided the same day to impose a special inspection process for reactors that operators are seeking to run beyond 40 years.

Japan has decided to limit the operation of reactors to 40 years in principle, but an exceptional extension of no more than 20 years is allowed when safety requirements are met.

During the special inspections, plant operators will be asked to conduct checks including ultrasound examinations to determine whether there are cracks in reactor pressure vessels. Operators have previously only been asked to check welded areas of the vessels.

Utilities will also be required to apply the latest scientific findings to existing facilities, which is expected to serve as a major hurdle for older reactors to continue operating, according to the NRA.

Of Japan's 50 surviving commercial reactors, three are already 40 years old -- one reactor at Japan Atomic Power Co.'s Tsuruga plant in Fukui Prefecture and two at Kansai Electric Power Co.'s Mihama plant, also in Fukui.

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