

TEPCO: Quake intensity at Fukushima plant exceeded safeguard standards

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The Tokyo Electric Power Co. announced Friday that the tremors that shook the Fukushima No. 1 nuclear power plant during the March 11 earthquake exceeded plant's quake-resistance standards.

Based on the government's 2006 revisions to quake-resistance guidelines, the level of tremor resistance was raised 60 percent by 2008, but it was still not enough to deal with the magnitude-9.0 temblor that struck northeastern Japan.

It was the first time that an earthquake exceeded the revised standards, meaning that that quake-resistance measures currently in place at nuclear power plants throughout the country are insufficient. Because of that, other nuclear power plants will be required to take further anti-quake measures.

TEPCO raised the intensity expected from underground tremors at the Fukushima No. 1 nuclear power plant in 2008, and reported to the government that the safety of the No. 3 and 5 reactors at the power plant were assured.

The Nuclear and Industrial Safety Agency (NISA) of the Ministry of Economy, Trade and Industry said that TEPCO's reports were appropriate.

According to data recorded by seismometers at the lowest floors of the Fukushima No. 1 nuclear power plant and released by TEPCO on Friday, the No. 2 reactor building suffered tremors of 550 gals, 1.25 times stronger than the maximum standard of 438 gals. (A gal is a unit that measures peak ground acceleration in earthquakes).

The corresponding figure for No. 5 reactor building stood at 548 gals, bigger than the maximum standard 452 gals. The figure for No. 3 reactor building was 507 gals, stronger than the maximum standard 441 gals.

TEPCO said its maximum standard for tremors was strong enough to withstand the Jogan Earthquake of 869, whose scale is considered to be similar to the Great East Japan Earthquake. They added that a quake with the intensity of the March 11 temblor takes place once every 10,000 to 1 million years.

The guidelines in place prior to the government's 2006 revisions were problematic because they were not high enough. Three nuclear power plants (in Miyagi, Ishikawa and Niigata Prefectures) in years before the revisions were shook by quakes whose tremors exceeded standard levels. Since the revised guidelines, electric power companies have been re-examining the safety of their nuclear power plants.

Meanwhile, TEPCO began spraying synthetic resins in the compound of the Fukushima No. 1 nuclear power plant on Friday in order to prevent radioactive dust from flying into the air. The resins prevent wind-borne dust for six-12 months.

On the same day, a U.S. military ship began transferring fresh water to tanks in the compound of the nuclear power plant.

P.S.

* From Asahi, 2011/04/03:

<http://www.asahi.com/english/TKY201104020232.html>