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## Quake may have damaged key piping at No.3 reactor

Tokyo Electric Power Company has released data which suggests the March 11th earthquake damaged a critical piping system in the No. 3 reactor at its Fukushima Daiichi nuclear plant.

The utility said that analysis of pressure and temperature data from the days after the quake shows that the No.3 reactor lost its cooling system on March 13th. Much of its nuclear fuel likely melted down and collected at the bottom of the pressure vessel over the next 24 hours.

The analysis also shows that piping in an emergency cooling mechanism, known as a high-pressure coolant injection system, may have been damaged by the earthquake. The system is designed to maintain the water level inside the reactor vessel during an emergency.

The system is known to have automatically switched on shortly after noon on March 12th.

Pressure inside the reactor, which was 75 atmospheric pressure, plunged to about 10 atmospheric pressure over the next six hours.

Tokyo Electric says the drop in pressure is consistent with analysis which assumes the piping system had been damaged.

The piping system is one of the plant's most important structures in terms of safety, and must be damage-proof.

Tokyo Electric refuses to confirm, however, that the key piping system was damaged by the quake, and suggests that it is possible a gauge malfunction may be to blame for the data fluctuation.

Experts note that extensive investigation is needed to examine whether the massive earthquake damaged the cooling system.

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