No uncontrolled reaction at Fukushima: operator

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Unit Three of the Fukushima Daiichi Nuclear Power Plant is seen in an undated photo released by Tokyo Electric Power Company. The operator of Japan's crippled Fukushima atomic plant Thursday played down fears of an uncontrolled chain reaction at the site, despite the discovery of evidence of recent nuclear fission.

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played down fears of an uncontrolled chain reaction at the site, despite the discovery of evidence of recent nuclear fission.

Rather, the No. 2 reactor of the Fukushima Daiichi power plant had probably experienced "spontaneous" fission that should cause no alarm, said Junichi Matsumoto, a senior nuclear officer at Tokyo Electric Power Co (TEPCO).

The concentration of radioactive materials found this week inside the reactor was too weak to have been produced by "criticality" -- an uncontrolled and sustained nuclear chain reaction -- he told a regular briefing.

TEPCO spokeswoman Chie Hosoda said the company is explaining the details to the government's nuclear watchdog agency.

"The concentration of radioactive xenon found in the gas samples (collected Tuesday and Wednesday) was very weak," about one 10,000th of the concentration that would be produced by critical reactions, she told AFP.

The level of xenon also matched the level that would have been produced by spontaneous fission, which could happen in a normal reactor, she said.

Sensors and measuring tools at the Fukushima Daiichi site have not shown any additional abnormality, she said.

"We believe this is not a case of criticality," Hosoda said, adding that the temperature of the reactor also has stayed stable.

TEPCO said Wednesday that it had detected small amounts of xenon-133 and xenon-135 inside the No. 2 reactor at the Fukushima

plant that came from fission -- the process by which an operating nuclear reactor produces power.

The Fukushima plant was severely battered by the March 11 earthquake and tsunami, which left some 20,000 people dead or missing.

The plant's reactors automatically shut down but nuclear fuel inside them was believed to have melted through its container onto the bottom of the outer vessels after the tsunami knocked out the plant's cooling systems.

Engineers are still trying to bring the reactors to stable "cold shutdown" by the end of this year.

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