

Crippled Japan nuclear plant hit by power cut

March 19 2013, by Kyoko Hasegawa



Members of the media, wearing protective suits and masks, are escorted by TEPCO employees around the tsunami-crippled Fukushima nuclear power plant in the town of Okuma, March 6, 2013. Engineers at Fukushima Tuesday partly succeeded in getting cooling systems back online after a power outage underlined the still-precarious state of the nuclear plant two years after the tsunam

Engineers at Japan's crippled Fukushima nuclear plant partially succeeded Tuesday in restarting cooling systems after a power cut underlined its still-precarious state two years after a tsunami struck.



Equipment in pools used to keep used fuel cool—necessary to prevent any spontaneous <u>nuclear reactions</u>—lost their power supply at 7 pm (1000 GMT) on Monday, operator TEPCO said.

By late Tuesday two of the cooling systems were back up, reports said. One other was likely to be online later in the day, the company said earlier.

Even used nuclear fuel becomes dangerous if its temperature is allowed to rise uncontrollably to the point where a self-sustaining critical reaction begins, causing a meltdown.

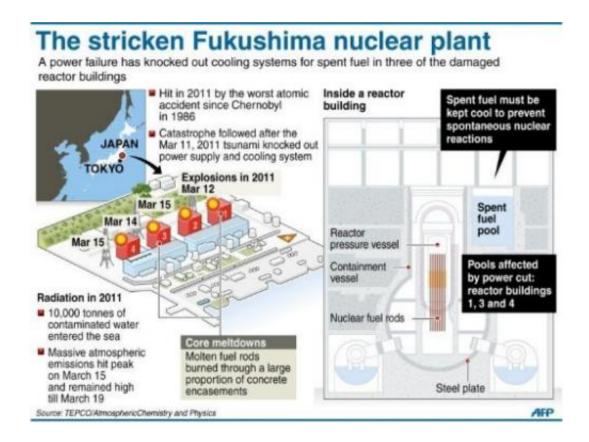
TEPCO, which was previously criticised for not telling the public or press exactly what was happening at the <u>atomic plant</u>, said there was no imminent danger, although it admitted it does not know what caused the fault.

"Electricity has been cut to pools used to cool spent fuel at reactors 1, 3 and 4" as well as to the equipment used to treat contaminated discharge including radioactive caesium, TEPCO spokesman Kenichi Tanabe said earlier.

Power was restored to part of the equipment, with the <u>cooling system</u> for the fuel pool at reactor 1 having returned to full operation at 2:20 pm Tuesday, TEPCO said in a statement.

Kyodo news reported the cooling system on the fuel pool at reactor 4 was also working again.





Graphic showing the stricken Fukushima nuclear plant in Japan where a power cut has forced the operator to shut down the cooling system for spent fuel pools.

The system on the pool at reactor 3 will likely return to full operation Tuesday evening, the company said.

2011 <u>nuclear crisis</u> A separate cooling system for a common pool is expected to be back online at 8:00 am on Wednesday, ending the current problem, it said. The common pool contains more than 6,000 used <u>fuel</u> rods.

The incident has not so far affected the injection of <u>cooling water</u> to reactors 1, 2 and 3 themselves, Tanabe said. These suffered core meltdowns soon after the start of the March 2011 nuclear crisis.



The temperatures of all fuel pools remains well below the safety limit of 65 degrees Celsius (149 Fahrenheit), and had been rising by 0.3-0.4 degrees every hour, the TEPCO spokesman said.

TEPCO officials said there had been no major changes in the level of radioactivity at nearby monitoring spots.

The meltdown of three of Fukushima's six reactors occurred after an earthquake and ensuing huge tsunami on March 11, 2011, shut off the power supply and cooling system.

TEPCO drew flak for playing down the scale of the disaster in the first few months. It has since admitted it had been aware of the potential dangers of a big tsunami but did nothing for fear of the reputational and financial cost.

The government gave its backing to the company's handling of the latest incident, saying a serious crisis appeared unlikely.

"As they are planning to take all possible substitute measures for cooling, we do not need to worry at all in a sense," said Chief Cabinet Secretary Yoshihide Suga.

That view was echoed by Akio Koyama, professor at Kyoto University's department of reactor safety management.

"At this point, I don't think anything serious will occur immediately," he told AFP.

"The important thing is to continue injecting water to the <u>nuclear fuel</u> in the <u>reactors</u> and continue cooling used fuel in the pool.

"Even if the water temperature goes up to 65 degrees Celsius, it would



not cause anything critical right away, as long as the fuel bars are covered in water.

"If the water levels get lower to the point where the fuel bars are exposed to the air, then we would have to worry."

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