

Japan: Power for reactor cooling lacking. Nuke plants' backups fall way short

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Power for reactor cooling lacking Nuke plants' backups fall way short

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Most nuclear reactors in Japan would fail to achieve a stable condition in the event that all regular power sources are lost, even though plant operators have prepared new backup power sources as well as electric generators amid the crisis at the Fukushima No. 1 nuclear plant, according to utility industry sources.

The possibility of a failure to secure the safety of the reactors is because the backup power sources do not have enough capacity to operate all of the devices needed to keep the reactors cool.

Many reactors still effectively have no alternative power source should emergency diesel generators fail to work, as was the case at the Fukushima plant after it was hit by a magnitude 9.0 earthquake and tsunami on March 11.

The government's nuclear regulatory body has instructed plant operators to prepare for a possible loss of power, such as by securing vehicle-mounted power sources, to prevent another disaster. At Fukushima, the power grid and most of the emergency diesel generators were knocked out by the quake and tsunami, resulting in the loss of the reactors' key cooling functions.

The 10 firms that own nuclear plants and the Japan Atomic Energy Agency, which is in charge of the Monju prototype fast-breeder reactor, said they have now deployed power-supply vehicles and portable power generators.

But utility sources said the power supply can only run measuring gauges and small-scale water injection devices. "They are far from being described as backups to emergency power generators," one of the sources said.

It was only Tokyo Electric Power Co. that said it can keep cooling four of its operating reactors at the Kashiwazaki-Kariwa nuclear power station in Niigata Prefecture by using one 4,500-kw power-supply vehicle and four 500-kw ones.

Among the operators that have not secured sufficient backups was Japan Atomic Power Co., which said it needs about 3,500 kw to safely keep cooling its No. 2 reactor at the Tsuruga power station in Fukui Prefecture, but only has deployed a 220-kw and a 800-kw power-supply vehicle.

The company is trying to secure three 1,825-kw power-supply vehicles with the hope of deploying them by around next March, the sources said.

Chubu Electric Power Co. has installed nine more diesel power generators for its five reactors, including two reactors that are in the process of being scrapped, at its Hamaoka plant in Shizuoka

Prefecture. The plant is at risk of being hit by a big earthquake expected in the Tokai region.

But the diesel generators, which have been placed on higher ground so they would not be affected by tsunami, have only a small power capacity, so the utility plans to locate three gas turbine generators at the site, the sources said.

Hokkaido Electric Power Co. has also deployed one 3,200-kw power-supply vehicle at its Tomari power station, but the capacity is not enough to achieve stable shutdown of the reactors and it plans to add a second vehicle within two years, the sources said.

Meanwhile, to release information in a more unified manner on how Japan is dealing with the country's worst nuclear disaster, the government and Tepco on Monday held a joint press conference for the first time.

The utility, the government's Nuclear and Industrial Safety Agency, the Nuclear Safety Commission of Japan, which is another oversight body, and the science ministry have separately held press conferences, but Goshi Hosono, Prime Minister Naoto Kan's special adviser, said he wants to avoid inconsistency or overlapping in the information released from various sources.

P.S.

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<http://search.japantimes.co.jp/cgi-bin/nn20110427a1.html>