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Japan trips in key effort to cool nuclear reactors

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TOKYO (Reuters) - The operator of Japan's crippled Fukushima nuclear plant halted on Monday its new, glitch-prone system that is key to cooling down damaged reactors due to a water leakage, a setback in its efforts to avoid dumping highly contaminated water into the ocean.

Managing huge amounts of radioactive water, accumulated from efforts to cool down reactors damaged by a massive quake and tsunami in March, has been a major challenge for Tokyo Electric Power Co, and officials have said it could spill into the Pacific Ocean soon unless the system got under way.

Tokyo Electric (Tepco) hopes that the system, which removes radioactive materials from contaminated water and recycles it as a coolant for reactors, would help it reach its goal of bringing the plant to stability by next January.

The system, using technology from French nuclear group Areva and U.S. company Kurion, started running on Monday afternoon after having encountered multiple setbacks in test runs in the recent weeks.

Goshi Hosono, an adviser to Prime Minister Naoto Kan, praised the move as "a giant step forward" and told a news conference that the system is critical in two aspects.

"First, the system will solve the problem of contaminated water, which gave all sorts of worries to the world. Second, it will enable stable cooling of reactors," he said.

But an hour and a half later, it was stopped after workers found water leaking from hoses.

Reactors at the plant, on 240 km (150 miles) north of Tokyo, went into meltdown after the March 11 disaster knocked out their cooling systems. Thousands of residents remain in temporary housing after being evacuated from around the plant.

Tepco aims to complete initial steps to cut radiation leaks by mid-July, and to bring by January the reactors to a state of "cold shutdown," where the uranium at the core is no longer capable of boiling off the water used as a coolant.

The system is designed to handle 1,200 metric tones of water a day. Currently, about 110,000 metric tones of radioactive water, which is enough to fill 40 Olympic-size swimming pools, is stored at the plant and space is running out.

The utility expects processing the estimated 250,000 metric tones of water that will have been contaminated by the time the crisis ends to cost about 53 billion yen (\$660 million).

"If you ask me whether I am still worried, I am," Hosono said. "But even if it does not function perfectly, if it can stably run with occasional inspections, then the stored water can be treated sufficiently."

Even if the system works, Tepco will face highly radioactive sludge left over from the decontamination process.

Japan upset neighboring China and South Korea in April after Tepco dumped low-level radioactive water into the sea.

Public fears about nuclear power have grown due to Fukushima crisis, and nearly 70 percent of Japanese oppose the restart of reactors halted for maintenance work, a poll by the Nikkei business daily showed.

(Editing by [Michael Watson](#) and [Yoko Nishikawa](#))



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