

## » Print

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to colleagues, clients or customers, use the Reprints tool at the top of any article or visit: www.reutersreprints.com.

## Japan seeks Russian help to end nuclear crisis

Mon, Apr 4 2011

By Chizu Nomiyama and Shinichi Saoshiro

TOKYO (Reuters) - Japan has asked nuclear superpower Russia to send a special radiation treatment ship used to decommission nuclear submarines to help in its fight to contain the world's worst atomic crisis since Chernobyl, Japanese media said late on Monday.

Japanese engineers at the Fukushima Daiichi nuclear plant have been forced to release radioactive waste water into the sea. At the same time they are resorting to desperate measures to contain the damage, such as using bath salts to try to locate the source of leaks at the crippled complex 240 km (150 miles) north of Tokyo.

Three weeks after a 9.0 magnitude earthquake and massive tsunami hit northeast Japan, sending some of Daiichi's reactors into partial meltdown, engineers are no closer to regaining control of the power plant or stopping radioactive leaks.



The quake and tsunami left nearly 28,000 people dead or missing and Japan's northeast coast a wreck.

The world's costliest natural disaster has caused power blackouts and cuts to supply chains and business hours. It is threatening economic growth and the yen, while a recent opinion poll suggested voters want embattled Prime Minister Naoto Kan to form a coalition in order to steer Japan through its worst crisis since World War Two.

Plant operator Tokyo Electric Power Co (TEPCO) was forced on Monday to release low-level radioactive seawater that had been used to cool overheated fuel rods after it ran out of storage capacity for more highly contaminated water.

A TEPCO official was in tears as he told a news conference: "We are very sorry for this region and those involved."

TEPCO said it would release more than 10,000 tonnes of water about 100 times more radioactive than legal limits in order to free storage capacity for more highly contaminated water.

"We have instructed strict monitoring of the ocean to firmly grasp the impact on the environment," Chief Cabinet Secretary Yukio Edano said.

Engineers planned to build two giant "silt curtains" made of polyester fabric in the sea to hinder the spread of more contamination from the plant.

Japan has also asked Russia for radiation treatment ship, the "Suzuran", which treats radioactive liquids, Kyodo and Jiji news agencies said.

The ship, a joint venture between Japan and Russia, was designed to help decommission nuclear submarines in Russia's Pacific fleet in Vladivostock, ensuring radioactive waste was not dumped into the Sea of Japan, Kyodo said.

But it could take months to stem the leaks and even longer to regain control of the power station, damaged by last month's quake and tsunami.

## DISASTER MAY SEE YEN WEAKEN

Japan, the world's third largest economy but also one of its most indebted nations, has estimated the damages bill may top \$300 billion.

"The damage from the nuclear crisis and the subsequent power shortage will last for several years," said Eiji Hirano, former assistant governor of the Bank of Japan (BOJ).

"There's a strong chance Japan's economy will contract in the current fiscal year," he told Reuters in an interview.

A former senior BOJ official, Eisuke Sakakibara, said the yen would weaken in the coming months, possibly beyond 90 to the dollar, underlining expectations a near four-year rally in the currency may be over.

The yen traded at 84.05 per dollar on Monday.

The disaster initially saw the yen soar on speculation Japanese would repatriate funds for reconstruction, prompting the G7 intervention to knock it back.

"This atomic power issue is an incident which would result in depreciation of the exchange rate," Sakakibara told reporters in Tokyo.

Unpopular and under pressure to quit or call a snap poll before the disaster, Prime Minister Kan has been criticised for his management of the disaster.

One newspaper poll said nearly two-thirds of voters wanted the government to form a coalition with the major opposition party and work together to recover from the disaster.

Japan's two biggest parties may join forces, but partisan bickering could delay funding for massive reconstruction.

## BATH SALTS, SEA CURTAIN

In their desperation to stop radioactive leaks, TEPCO engineers have used anything at hand. They have mixed sawdust and newspapers with polymers and cement in an unsuccessful attempt to seal a crack in a concrete pit at reactor No.2.

On Monday, they resorted to powdered bath salts to produce a milky colour in water to help trace the source of the leak.

TEPCO said it was also planning to drape a curtain into the sea off the nuclear plant to try to prevent radioactive silt drifting out into the ocean.

The silt-blocking fence will take several days to prepare, said Hidehiko Nishiyama, deputy director-general of the Nuclear and Industrial Safety Agency (NISA).

The exact source of the radiation leaks remains unknown. NISA is investigating a damaged embankment near a sluice gate at the No.2 reactor and the possibility it may be seeping through a layer of small stones below a concrete pipe.

TEPCO said it would build tanks to hold contaminated seawater, was towing a floating tank which will arrive next week, and was negotiating the purchase of three more.

"If the current situation continues for a long time, accumulating more radioactive substances, it will have a huge impact on the ocean," Edano said.

Small levels of radiation from the plant have been detected as far away as Europe and the United States and several countries have banned milk and produce from the vicinity.

Singapore extended a ban on Japanese food imports on Monday after detecting radiation in more fruit and vegetable imports. While Kan asked the European Union on Monday for a calm response to Japanese imports. The EU has urged radiation testing of Japanese food and feed imports.

(Additional reporting by Yoko Nishikawa, Yoko Kubota, Linda Sieg, Leika Kihara, Tetsushi Kajimoto in Tokyo; Writing by Michael Perry; Edlting by Daniel Magnowski)

© Thomson Reuters 2011. All rights reserved. Users may download and print extracts of content from this website for their own personal and non-commercial use only. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is expressly prohibited without the prior written consent of Thomson Reuters. Thomson Reuters and its logo are registered trademarks or trademarks of the Thomson Reuters group of companies around the world.

Thomson Reuters journalists are subject to an Editorial Handbook which requires fair presentation and disclosure of relevant interests.

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to colleagues, clients or customers, use the Reprints tool at the top of any article or visit: www.reutersreprints.com.