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One week in, Japan pins hopes on power cable

Power cable needed to provide electricity and restart reactor's cooling systems connected, while emergency measures continue



A toddler gets screened for radiation at an evacuation center in Fukushima, Japan March 18, 2011, as fears of radiation leaks continued at the quake-hit Fukushima Dai-ichi nuclear plant. **(Kyodo via AP Images)**

(CBS/AP)

Japan may be one step closer to restoring power to its overheated, radiation-leaking nuclear complex that was crippled by the earthquake and tsunami one week ago Friday.

A few dozen workers at the Fukushima Dai-ichi power plant were able to connect a power cable needed to restart the reactors' cooling systems, reports CBS News correspondent Bill Whitaker.

For a second day, fire trucks doused reactor 3 with 12,000 gallons of water in a desperate effort to cool

the overheating spent fuel rods sitting in storage pools. If left exposed, these fuel rods - and others in reactor 4 - could melt and spew deadly radiation into the atmosphere.

Officials have cautioned that even if power is restored, there is no guarantee the cooling system will work again.

Earlier Friday, the Japanese government acknowledged that it was overwhelmed by the scale of last week's twin natural disasters, slowing the response to the nuclear crisis.

The admission came as Japan welcomed U.S. help in stabilizing its overheated, radiation-leaking nuclear complex, and reclassified the rating of the nuclear accident from Level 4 to Level 5 on a 7-level international scale, putting it on a par with the 1979 Three Mile Island accident in the United States.

The Japanese government has said the situation at reactor 4 is not as serious as reactors 2 and 3, but there is growing evidence that reactor 4 does pose a significant threat. Photos taken by U.S.

drones indicate water levels in reactor 4's storage pool keep dropping - perhaps because of an unseen hole or crack suffered in last Friday's earthquake. This could release more radioactivity than at any point in the crisis.

Nuclear experts have been saying for days that Japan was underplaying the crisis' severity.

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The [International Nuclear Event Scale](#) (PDF) defines a Level 4 incident as having local consequences and a Level 5 as having wider consequences.

Hidehiko Nishiyama of Japan's nuclear safety agency said the rating was raised when officials realized that at least 3 percent of the fuel in three of the reactors at the Fukushima Dai-ichi plant had been severely damaged, suggesting those reactor cores have partially melted down and thrown radioactivity into the environment.

[Disaster in Japan: Latest developments](#)

"The unprecedented scale of the earthquake and tsunami that struck Japan, frankly speaking, we're among many things that happened that had not been anticipated under our disaster management contingency plans," said Chief Cabinet Secretary Yukio Edano, admitting that information had not been shared quickly enough.

"In hindsight, we could have moved a little quicker in assessing the situation and coordinating all that information and provided it faster," he said.

Later, Prime Minister Naoto Kan urged the nation to unite.

"We will rebuild Japan from scratch. We must all share this resolve," he said in a nationally televised address, calling the crises a "great test for the Japanese people."

Separately Friday, a diplomat with access to [U.N. tracking of Japan's radioactive fallout said it has reached Southern California](#) but first readings are "about a billion times beneath levels that would be health threatening."

The diplomat was citing readings Friday from California-based measuring station of the Vienna-based CTBTO. He asked for anonymity because the Comprehensive Test Ban Treaty Organization does not make its data public.

Scientists have repeatedly said the plume will lose its radiation concentration and won't be a threat to people in the West. On Friday, deputy U.S. Energy Secretary Daniel Poneman echoed

those assurances and downplayed concerns about trace amounts of radiation detected on flights arriving at U.S. airports.

Last week's 9.0 quake and tsunami set off the nuclear problems by knocking out power to cooling systems at the Fukushima plant on the northeast coast. Since then, four of its six reactor units have seen fires, explosions or partial meltdowns.

The unfolding crises have led to power shortages in Japan, forced factories to close, sent shockwaves through global manufacturing and triggered a plunge in Japanese stock prices.

"We see it as an extremely serious accident," Yukiya Amano, the head of the U.N.'s International Atomic Energy Agency, told reporters Friday in Tokyo. "This is not something that just Japan should deal with, and people of the entire world should cooperate with Japan and the people in the disaster areas."

"I think they are racing against the clock," he said of the efforts to cool the complex.

One week after the twin disasters -- which has officially left more than 6,500 dead and over 10,300 missing -- emergency crews are facing two challenges in the nuclear crisis: cooling the reactors where energy is generated, and cooling the adjacent pools where used nuclear fuel rods are stored in water.

Both need water to stop their uranium from heating up and emitting radiation, but with radiation levels inside the complex already limiting where workers can go and how long they can remain, it's been difficult to get enough water inside.

If the effort to cool the reactors fails, Japanese engineers conceded that they may have to bury the nuclear plant in sand or encase it in concrete to try to contain the radiation.

[Nuclear tomb: Japan may bury stricken plant](#)

Edano said Tokyo is asking the U.S. government for help and that the two are discussing the specifics.

"We are coordinating with the U.S. government as to what the U.S. can provide and what people really need," Edano said.

While Tokyo quickly welcomed international help for the natural disasters, the government initially balked at assistance with the nuclear crisis. That reluctance softened as the problems at Fukushima multiplied. Washington says its technical experts are now exchanging information

with officials from Tokyo Electric Power Co., which owns the plant, and with government agencies.

[As foreigners flee Tokyo, Japanese lament lack of info](#)

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Meanwhile, tsunami survivors observed a minute of silence Friday afternoon to mark one week since the quake, which struck at 2:46 p.m. Many were bundled up against the cold at shelters in the disaster zone, pressing their hands together in prayer.

Low levels of radiation have been detected well beyond Tokyo, which is 140 miles south of the plant, but hazardous levels have been limited to the plant itself. Still, the crisis has forced thousands to evacuate and drained Tokyo's normally vibrant streets of life, its residents either leaving town or holing up in their homes.

The Japanese government has been [slow in releasing information](#) on the crisis, even as the troubles have multiplied. In a country where the nuclear industry has a long history of hiding its safety problems, this has left many people -- in Japan and among governments overseas -- confused and anxious.

"We have enough to worry about already. The nuclear crisis makes it all worse," said Yaeko Sato, 57, wrapped in two blankets in a hilltop shelter above the town of Shizugawa, sitting beside a list of the dead and the missing. She and her husband fled in their car, but now have no gas and cannot leave. "All we hear are rumors."

"We are worried about the nuclear crisis, but we are more worried about how we will rebuild our lives. I don't know how many months we'll have to stay here. I don't know where we will live," she said.

At times, Japan and the U.S. -- two very close allies -- have offered starkly differing assessments over the dangers at Fukushima. U.S. Nuclear Regulatory Commission Chairman Gregory Jazcko said Thursday that it could take days and "possibly weeks" to get the complex under control. He defended the U.S. decision to recommend a 50-mile evacuation zone for its citizens, wider than the 12-mile band Japan has ordered.

President Barack Obama assured Americans that officials do not expect harmful amounts of radiation to reach the U.S. or its territories. He also said the U.S. was offering Japan any help it could provide.

[Video: Obama says radiation shouldn't reach U.S.](#)

[Video: Obama commissions U.S. nuke safety review](#)

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Police said more than 452,000 people made homeless by the quake and tsunami were staying in schools and other shelters, as supplies of fuel, medicine and other necessities ran short. Both victims and aid workers appealed for more help, as the chances of finding more survivors dwindled.

About 343,000 Japanese households still do not have electricity, and about 1 million have no water.

At the Fukushima plant, a core team of 180 emergency workers has been rotating out of the complex to minimize radiation exposure.

The storage pools need a constant source of cooling water. Even when removed from reactors, uranium rods are still extremely hot and must be cooled for months, possibly longer, to prevent them from heating up again and emitting radioactivity.

The actions authorities are taking to cool the reactors are the best ones available, experts say. Eventually, the plant may be entombed in concrete, as was done hastily after the 1986 Chernobyl reactor accident.

But pressures and temperatures must be controlled before then, said Mario V. Bonaca, an adviser to the U.S. Nuclear Regulatory Commission. Otherwise, he said, overheated nuclear fuel will melt or burst through the sand, cement or other covering and release more radiation.

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