Japan Releases 40-Year Nuke Plant Cleanup Plan

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TOKYO (AP) — Japan's government said Wednesday that it could take 40 years to clean up and fully decommission a nuclear plant that went into meltdown after it was struck by a huge tsunami.

Nuclear crisis minister Goshi Hosono suggested that the timetable was ambitious, acknowledging that decommissioning three reactors with severely melted fuel plus spent fuel rods at the Fukushima Dai-ichi plant was an "unprecedented project," and that the process was not "totally foreseeable."

"But we must do it even though we may face difficulties along the way," Hosono told a news conference.

Under a detailed roadmap approved earlier Wednesday following consultation with experts and nuclear regulators, plant operator Tokyo Electric Power Co. will start removing spent fuel rods within two to three years from their pools located on the top floor of each of their reactor buildings.

After that is completed, TEPCO will start removing the melted fuel, most of which is believed to have fallen to the bottom of the core or even down to the bottom of the larger, beaker-shaped containment vessel, a process that is expected to begin in 10 years and completed 25 years from now. The location and conditions of the melted fuel is not exactly known.

That's more than twice as long as it took to remove the fuel from the Unit 2 reactor at Three Mile Island that suffered a partial meltdown in 1979.

Trade Minister Yukio Edano promised that authorities would ensure safety at the plant. He also vowed to pay attention to the concerns of tens of thousands of residents displaced when the plant was knocked out by Japan's March 11 earthquake and tsunami, spawning the world's worst nuclear crisis since the Chernobyl accident in 1986.

"We must not allow the work toward decommissioning to cause any new risks or delay the return of the residents to their homes," he said.

Completely decommissioning the plant would require five to 10 more years after the fuel debris removal, making the entire process up to 40 years, according to the roadmap.

The roadmap for Fukushima is twice as long the time set aside to decommission the Tokai Power Station, the country's first commercial reactor that stopped operation in 1998.

The process still requires the development of robots and technology that can do much of the work remotely because of extremely high radiation levels inside the reactor buildings. Officials say they are aiming to have such robots by 2013 and start decontaminating the reactor buildings in 2014.

The operator and the government would also have to ensure a stable supply of workers and save them from exceeding exposure limits while keeping the long process going.

They also have to figure out ways to access each containment vessel and assess the extent of damage, as well as locate holes and cracks through which cooling water is leaking and flooding the area.

The decades-long process also would place an enormous financial burden on TEPCO. The ministers said that the total cost estimate cannot be provided immediately, but promised that there will be no delay because of financial reasons.

Prime Minister Yoshihiko Noda announced last Friday that the plant has achieved "cold shutdown conditions," meaning the plant had been brought to stability in the nine months since the accident.

The announcement officially paves the way for a new phase that will eventually allow some evacuees back to less-contaminated areas currently off limits.

Experts say the plant 140 miles (230 kilometers) northeast of Tokyo is running with makeshift equipment and remains vulnerable to cold weather and earthquakes.

Another problem is huge volume of radioactive waste and debris that will come out of the plant during its dismantling process. Officials said they have not decided what to do with them and that part is not covered by the 40-year roadmap.

"We still need to discuss what to do with the waste, including development of such technology," said Koichi Noda, a trade ministry official in charge of nuclear accident cleanup.

The two ministers acknowledged that they may not be even around to see the decommissioning process through the end.

"I will take responsibility as a person and get involved in this as long as I live," Edano said.

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