

China blames minor fuel rod damage for nuclear plant issues

June 16 2021



China and French energy giant EDF have blamed the issues at the Taishan nuclear power station on minor fuel rod damage.

A handful of damaged fuel rods is behind a build-up of radioactive gases at a nuclear power station in southern China, authorities said Wednesday, describing the problem as "common" with no need for

concern.

CNN reported earlier this week that the US government was assessing a report of a leak at the Taishan plant in China's southern Guangdong province, and French nuclear firm Framatome—which helps operate the plant—reported a "performance issue".

There has been an increase in radioactivity in one of the plant's two nuclear power units due to five damaged fuel rods, said a joint statement by China's environment ministry and the National Nuclear Safety Administration.

"Due to the influence of uncontrollable factors in fuel manufacturing, transportation, loading and other links, a small amount of fuel rod damage is inevitable," said the statement, calling it a "common phenomenon".

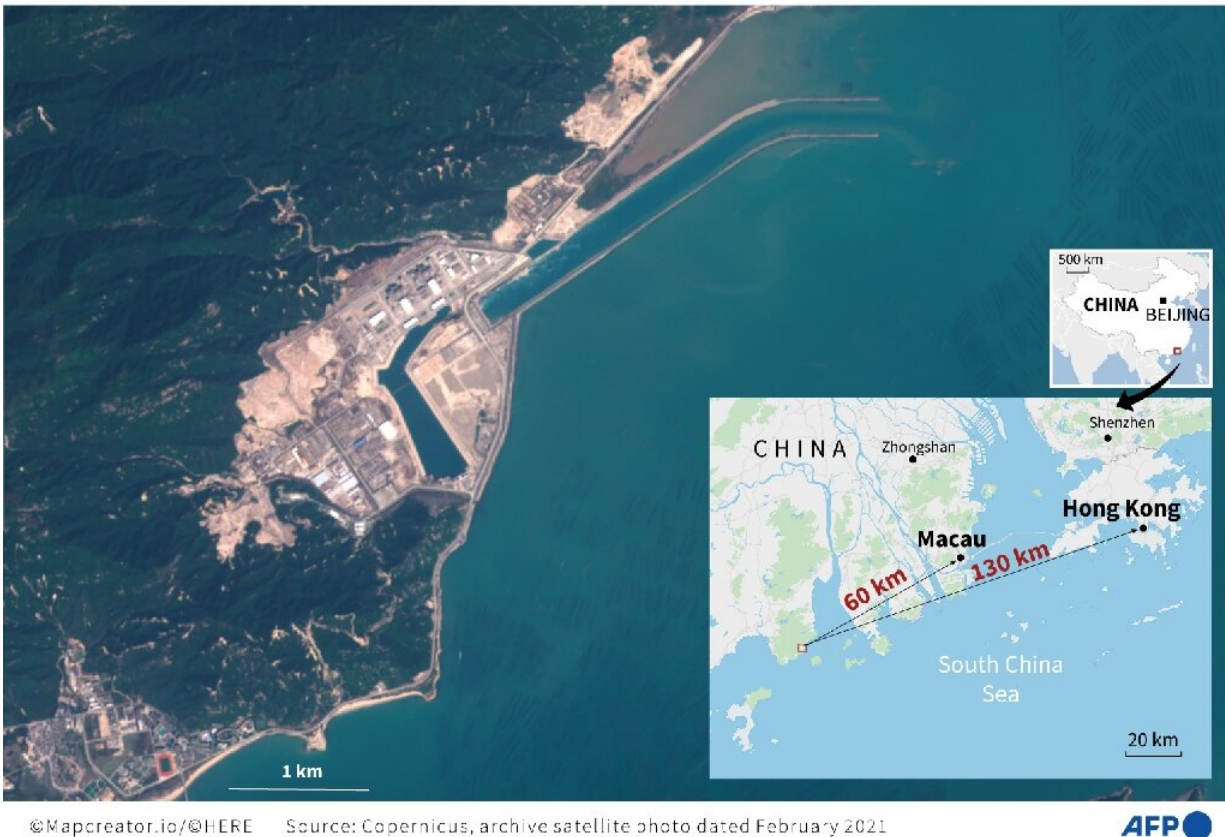
There are more than 60,000 fuel rods in the core unit, the statement said, and the proportion of damaged rods is "less than 0.01 percent".

The ministry said that the increase in radioactivity is "within the permitted range of stable operation" for nuclear power plants, and "there is no issue of radioactive leakage to the environment".

Earlier this week, French energy giant EDF—the majority owner of Framatome—had also blamed the build-up of gases in one of Taishan's reactors on the deteriorating of coating on some uranium fuel rods.

EDF said it was first informed about the fuel rod problem in October, but only learned about the gas build-up on Saturday.

The Taishan nuclear power plant



Satellite photo of the Taishan nuclear power plant in China with distances to Macau and Hong Kong.

Official environmental monitoring data shows a slight increase in radiation near Taishan compared with other nuclear plants in China, but experts say this remains within the normal range of environmental radiation levels in Guangdong.

Chinese authorities said the environmental monitoring results around Taishan showed that radiation levels are "normal, at the background level, and there is no leakage".

Powered up in 2018, the Taishan plant was the first worldwide to operate a next-generation EPR nuclear reactor—a pressurised water design that has been subject to years of delays in similar European projects in Britain, France and Finland.

There are now two EPR power units at Taishan, which sits close to the coastline of Guangdong and the financial hub of Hong Kong.

China has dozens of nuclear plants—the world's third-highest after the United States and France—and has invested billions of dollars to develop its atomic energy sector.

The Chinese government statement on Wednesday also denied claims in the earlier CNN report that it was raising the acceptable limit of radiation detection around the plant.

The nuclear safety administration has only outlined one incident at Taishan in recent months, which happened on April 5, when it says a "small amount of radioactive gas unexpectedly entered" the water-sealed pipeline in the plant's first unit.

The statement said that the incident had been inspected and the total amount of gas discharged accounted for 0.00044 percent of the annual emission limit.

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