

South Korean reactor to restart despite protests

High electricity demand accelerates plans to reopen reactor after malfunction.

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South Korea's oldest nuclear reactor is set to restart after a four-month closure, despite strong opposition from local residents and activists.

The Kori-1 reactor in Busan was shut down on 13 March, after it was revealed that the reactor and its emergency generator had temporarily lost power during routine maintenance the month before, causing the coolant temperature to rise.

The power failure did not cause an accident, but a report by the International Atomic Energy Agency in Vienna discovered that senior engineers from Korea Hydro and Nuclear Power, which runs the reactor, had neglected the safety problems for more than a month after the loss of power.

In June, after a safety check, the IAEA gave the green light for Kori-1 to resume operation. Korea's Nuclear Safety and Security Commission (NSSC) approved the restart on 4 July, but activists and local residents remain strongly opposed to restarting the reactor.

At first, the Korean Ministry of Knowledge Economy, which oversees energy policy, had said that the restart would be delayed to alleviate anxiety. But the government changed its mind as a result of a nationwide heatwave that has put a strain on the country's electricity supply in recent days.

Power for the people

"We keep talking with residents but reaching a consensus is expected to take time. There is no choice but to restart the operation of the Kori-1 reactor on 3 August at the latest," said Sukwoo Hong, the minister of knowledge economy, at a press conference on 26 July.

Hiromitsu Ino, an emeritus professor of materials science at the University of Tokyo, says that Kori-1 is not safe to operate because the weld material in the pressure vessel has degraded. "Any 50 nuclear power plants in Japan are much better than Kori-1," he says.

Il Soon Hwang, a nuclear scientist at Seoul National University, says that a thorough government investigation found that the pressure vessel is safe. However, he adds that a more democratic process is needed to get a consensus on the reactor from local residents.

"The most serious issue is that staff in the control room decided not to report the more than ten minutes of blackout and tried to hide this accident," says Hwang, adding that Korea's nuclear-safety authority hasn't explained enough to residents about what is being done to ensure that such a dangerous situation will not be repeated.

South Korea currently has 23 nuclear reactors in operation and three more under construction; about 35% of the country's electricity comes from nuclear power, according to the IAEA. When it was first opened, the Kori-1 reactor was given an operational lifespan of 30 years, which ran out in 2007. But in 2008, following an IAEA inspection, the reactor was declared safe for another 10 years.

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The Kori-1 nuclear reactor (back, far right) was shut down in March after a malfunction.