

Fault under Japan nuclear plant 'may be active'

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Kansai Electric Power Co (KEPCO) engineers check readings at the company's Oi nuclear power plant in the town of Oi, Fukui prefecture in July 2012. Japan's only working nuclear power plant sits on what may be a seismic fault in the earth's crust, a geologist has warned, saying it is "very silly" to allow it to continue operating.

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Mitsuhisa Watanabe says the earth's plates could move under the Oi <u>nuclear plant</u> in western Japan, causing a catastrophe to rival last year's atomic disaster at <u>Fukushima</u>—although some of his colleagues on a nuclear <u>advisory panel</u> disagree.

"It is an active fault. The plates shifted some 120,000 to 130,000 years ago for sure," Watanabe, of Tokyo's Toyo University, told AFP.

"In research that I have conducted on active faults in Japan and overseas, structures built above them were all damaged" when they moved and caused an earthquake, he said.

Watanabe, a tectonic geomorphologist, is part of a five-member team tasked by the Nuclear Regulation Authority with looking into the tectonic situation underneath the plant, which houses the country's only working reactors.

Under government guidelines atomic installations cannot be sited on a fault—the meeting place of two or more of the plates that make up the earth's crust—if it is still classed as active, that is, one that is known to have moved within the last 130,000 years.

A positive finding would mean regulators must order the suspension of operations at the plant in Fukui prefecture.

But other scientists on the panel say it is too early to class it as an "active" fault that might pose a risk to the plant, calling for "a scientifically calm approach".

The team's head, Kunihiko Shimazaki, who is also a member of Japan's nuclear regulatory body, says the geological scarring they can see was probably caused by little more than a long-ago landslide.



Instead of the definitive green light that plant operator Kansai Electric Power (KEPCO) was hoping for, the committee last week said only that more work needs to be done.

"It's desirable for all members to reach a conclusion by consensus," Shimazaki said.

However Watanabe, asked if the government should allow KEPCO to continue running the plant at Oi, said: "It would be a very silly option."

"We would have learned nothing from Fukushima. I'm afraid we would see a repeat (of the disaster) one day."

He maintains that the plant could be vulnerable to a sizeable earthquake, which might "cause a very serious problem... similar to the Fukushima one".

But he stresses that the science thus far is simply not conclusive and argues work should halt out of an abundance of caution.

"We are not seeking to decommission the plant," Watanabe said. "We should first stop operation and then carry out underground investigation thoroughly before reaching a conclusion."

All Japan's nuclear reactors were shut down in the months after the disaster at Fukushima, when an earthquake-sparked tsunami knocked out cooling systems and caused meltdowns that scattered radiation over a large area.

Hundreds of thousands were made homeless and tracts of prime agricultural land were left unfarmable.

Despite widespread public fears over the safety of nuclear power, Prime



Minister Yoshihiko Noda in June ordered the restarting of reactors at Oi amid fears of a summer power shortage.

That ended a brief nuclear-free period for a country that—until the Fukushima disaster—had relied on atomic power for around a third of its electricity needs.

The move was welcomed by the influential business lobby but was deeply unpopular with a vocal anti-nuclear movement. Regular antinuclear protests continue to be held in Tokyo.

On Sunday, the 20-month anniversary since the Fukushima disaster, several thousand anti-nuclear protesters rallied in Tokyo's government district.

"No need to wait for the panel's finding! We must stop the Oi plant now!" one shouted outside the parliament building.

With a possible eye on the general election expected over the coming months, the government announced in September it would work towards a policy of phasing out <u>nuclear power</u> by 2040.

Critics rounded on the announcement as both populist and "incoherent" because it contained get-out clauses that would mean as-yet unfinished nuclear plants would still come online.

Watanabe said a heavy burden rests on those tasked with ensuring public safety, citing the jail sentences imposed on six seismologists in Italy after a court said their underestimation of the possible effects of an earthquake had contributed to the death toll in the central city of L'Aquila.

"We have to sound the alarm as soon as we find the possibility of active



faults," he said. "The accident in Fukushima had really never been imagined. Scientists must learn from that."

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