

US orders its nuclear sites to upgrade vents (Update)

March 19 2013, by Matthew Daly

U.S. nuclear power plants must upgrade ventilation systems at 31 reactors with designs similar to those that melted down two years ago in Japan, under a Nuclear Regulatory Commission order that stops short of requiring filtered vents, as some safety advocates and NRC's staff had urged.

The filters are required in Japan and much of Europe, but U.S. utilities say they are unnecessary and expensive.

The order issued Tuesday requires U.S. operators to upgrade vents to ensure they remain operable even during severe accidents, such as the March 2011 earthquake and tsunami that crippled Japan's Fukushima Dai-ichi nuclear plant. The tsunami sent three of the plant's reactors into meltdown in the world's worst nuclear crisis in a quarter-century.

The commission said the order will improve safety and help prevent radioactive particles from escaping into the atmosphere after a Japan-style meltdown.

The commission also directed its staff to study a rule requiring filters at two dozen nuclear sites with 31 boiling water reactors similar to the ones in Japan that melted down. The commission also will consider a performance-based approach that would use existing systems to achieve similar results to limit release of radioactive materials. The rule would not be finalized until 2017.

NRC Chairman Allison Macfarlane said the commission reached its decision after months of review, as the five-member panel considered a host of post-Fukushima safety reforms. The NRC issued several orders last year on the first anniversary of the disaster, including a requirement that plants install or improve venting systems to limit core damage in a serious accident.

"I compliment my colleagues and the staff for their sustained efforts on this issue and for taking a hard look at a complex matter," Macfarlane said in a statement. Macfarlane took over the agency last summer after its former chairman, Gregory Jaczko, resigned amid complaints about an unyielding management style that fellow commissioners and agency employees described as bullying.

Macfarlane, a geologist, has pledged a strong commitment to collegiality since taking over the agency last July.

Commission records show she and commissioner George Apostolakis, both Democrats, supported the filter requirement but were outvoted by the three other commissioners.

Edwin Lyman, a nuclear expert at the Union of Concerned Scientists, a watchdog group, called the commission's decision disappointing.

"We think the (NRC) staff made a sound case" for the filter requirement, Lyman said. "We don't think we need more study."

Lyman and other critics blamed the decision on intense lobbying against the rule by the nuclear industry.

"The level of industry opposition really was a force that derailed the commission's decision-making," Lyman said.

Anthony Pietrangelo, senior vice president of the Nuclear Energy Institute, the industry's largest lobbying group, hailed the NRC vote.

"With this direction to the NRC staff, the commission is addressing the central issue: What is the most effective way to filter containment vents to reduce radiation releases in extreme situations where a reactor may be damaged?" Pietrangelo said.

The nuclear group has said that filters—which cost anywhere from \$16 million to \$40 million per reactor—may work in some situations, but not all.

Rep. Edward Markey, a Democrat, a frequent critic of the nuclear industry and the NRC, blasted the decision, which he called irresponsible.

"The NRC has abdicated its responsibility to ensure public health and safety in New England and across the country," said Markey, who is running for Senate in a special election to fill the seat vacated by Secretary of State John Kerry.

Instead of following the safety recommendations of its top experts, the NRC "chose to grant the nuclear power industry's requests for more studies and more delays," Markey said. Even after the study is completed there is no guarantee the NRC will require filters at U.S. reactors, Markey said.

Copyright 2013 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: US orders its nuclear sites to upgrade vents (Update) (2013, March 19) retrieved 24 May 2024 from <https://phys.org/news/2013-03-nuclear-sites-vents.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.