

# United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

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March 17, 2011

The Honorable Gregory Jaczko  
Chairman  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Chairman Jaczko:

The loss of life and physical damage that Japan sustained in last week's devastating earthquake and subsequent destructive tsunami is catastrophic and heartbreaking. Our thoughts and prayers, as well as those of the American people, go out to all citizens of Japan and especially to the families of the thousands of disaster victims.

As this tragedy continues to unfold, we encourage the Nuclear Regulatory Commission and other U.S. agencies to continue to coordinate fully with the Japanese government to assess the status of public safety in light of the reactors' failures and to provide all technical assistance required.

The earthquake and tsunami that struck Japan are chilling reminders that we are all vulnerable to unexpected disasters, whether they are an act of nature or a terrorist attack. While we cannot predict with any certainty when or where the next major disaster will occur, we know that adequate preparation and response planning are absolutely vital to minimize injury, death, and destruction when it does happen.

As the Committee with oversight responsibilities on nuclear safety, we believe it is important to assist Japan to ensure that this nuclear disaster is contained as quickly and effectively as possible. For the long term, the multiple simultaneous failures of backup coolant systems at nuclear reactors in Japan are a clear warning that we must step up efforts to ensure that every precaution is taken to safeguard the American people from a similar incident at a U.S. nuclear facility.

Therefore, we call on the NRC to conduct a comprehensive investigation of all nuclear facilities in the United States to assess their capacity to withstand catastrophic natural or man-made disasters including scenarios that may be considered remote like the recent events in Japan. These domestic nuclear reactors must be fully evaluated to ensure that they are as safe and resilient as possible, that worst case scenarios are examined and addressed, and that personnel training and equipment for emergency responses are in place and up-to-date. Special and immediate attention should be given to those U.S. nuclear reactors that share similar characteristics as the failing reactors in Japan, including similar designs or located near a coastline or seismic fault line.

In addition to updating the EPW Committee on a regular basis, we also request that the NRC supply information to the committee as soon as possible regarding the following issues:

1. Please identify all U.S. nuclear facilities subject to significant seismic activity and/or tsunamis.
2. U.S. nuclear power plants are designed to be safe based on historical data of the area's maximum credible threat (including earthquakes and tsunamis). What extra safety features does the NRC currently require for facilities that have a credible threat of an earthquake and/or tsunami? In light of the recent events in Japan, we would also like the NRC to re-examine the assumptions used to determine the maximum credible threat and suggest additional options that could provide a greater margin for safety at plants nationwide that might be subject to challenges similar to those currently being seen in Japan following the earthquake and tsunami.
3. Which U.S. nuclear power plants share similar design features with the affected Japanese reactor facilities? Do these facilities have design vulnerabilities that should be addressed to ensure their cooling systems do not fail when confronted by stresses including those similar to what we have seen in Japan following the earthquake and tsunami?
4. How comprehensive is the radiation monitoring system in Japan? Would the U.S. take a similar monitoring approach if a serious accident were to occur here? What increased risk is associated with exposure to mixed oxide fuel?
5. Given what has happened at the Japanese facilities, please describe how the NRC currently ensures the safety of spent fuel pools at U.S. facilities and identify additional steps the NRC could take to better address the vulnerabilities of spent fuel pools at plants in the U.S.
6. Has the NRC modeled what could happen if the U.S. had multiple nuclear accidents simultaneously? If so, how would the NRC respond to such a disaster?

Safety is always our number one priority, and therefore it is vital that the NRC immediately evaluate the risks posed to nuclear reactors in the United States. We look forward to working with you to ensure that the nuclear energy industry and NRC regulators are adequately prepared to prevent accidents and to fully address the risks of serious events in the future.

Sincerely yours,



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Barbara Boxer  
Chairman  
Committee on Environment and  
Public Works



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Tom Carper  
Chairman  
Subcommittee on Clean Air and  
Nuclear Safety