

Congress of the United States
Washington, DC 20515

February 27, 2013

The Honorable Allison M. Macfarlane
Chairman
Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Dear Chairman Macfarlane:

We are writing to urge the Commission to vote to adopt the recommendations of the Nuclear Regulatory Commission (NRC) staff and require that all nuclear reactors that utilize a Mark I and Mark II boiling water reactor (BWR) design in the U.S. install filters on their hardened containment vents and ensure that these vents would be operable under severe accident conditions.

On March 11, 2011, a powerful earthquake occurred near Japan and launched a tsunami that inundated the Fukushima Daiichi nuclear power plant. As a result, the nuclear reactors lost off-site power and several also lost backup power. With no power, cooling of the reactor cores failed and the cladding on the overheated fuel reacted with steam to produce hydrogen gas. This gas together with the steam created excessively high pressure in the reactor vessel. At this point in such a severe nuclear accident there are no good choices, but there are ways to make the consequences less severe. Venting the containment to relieve the pressure buildup and to remove the hydrogen can prevent damage to the containment and reduce the likelihood of a hydrogen explosion like the ones that occurred at Three Mile Island and several of the reactors at Fukushima.

In the 1980s, NRC encouraged owners of all Mark I BWRs to install vents that are hardened to be able to withstand the pressures and conditions likely to be present when venting the containment during a nuclear accident. The reactors at Fukushima installed such vents as well, although the loss of power at the reactor site impaired the ability of the reactor operators to successfully use these vents. In the aftermath of Fukushima, the Commission rightly voted to require owners of all Mark I and Mark II BWRs to have hardened containment vents and to ensure that those vents would be reliable in an accident.

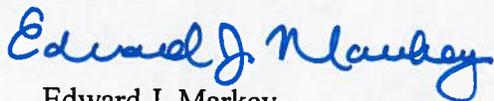
While venting can protect the containment, in nearly all severe accident scenarios (where the vents are most desperately needed) there would be radiological materials in the vented gasses. To avoid unnecessary exposure of the public to radiological materials and to minimize land and water contamination, the gasses vented from the containment must be filtered. This is

the practice in Canada and in many European countries. Recently, the NRC staff strongly recommended that the Commission similarly require the installation of filters engineered to work in severe accident conditions on the hardened containment vents of Mark I and Mark II BWRs.

This common-sense measure to protect the public from radiological exposure should be implemented as soon as possible, and we encourage you and your colleagues to resist pressure to ignore the NRC staff recommendations.

Thank you very much for your consideration of this important matter.

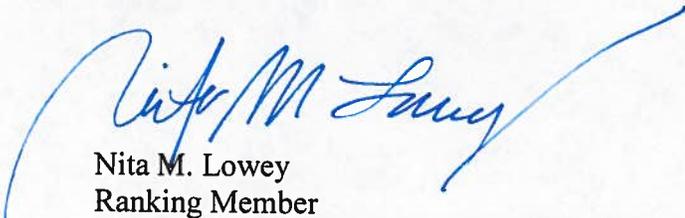
Sincerely,



Edward J. Markey
Ranking Member
House Committee on Natural Resources



Henry A. Waxman
Ranking Member
House Committee on Energy and Commerce



Nita M. Lowey
Ranking Member
House Committee on Appropriations



Elijah E. Cummings
Ranking Member
House Committee on Oversight &
Government Reform



Eliot L. Engel
Ranking Member
House Committee on Foreign Affairs