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PO Box 215  
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April 6, 2007

Secretary of the U.S. Nuclear Regulatory Commission  
Washington, DC 30555-0001

(also sent electronically to [VermontYankeeEIS@nrc.gov](mailto:VermontYankeeEIS@nrc.gov))

Re: Massachusetts Attorney General's appeal to NEPA concerning new and significant information about the safety and security of spent fuel assemblies

Dear Secretary of the U.S. Nuclear Regulatory Commission,

*INSERT:* I wrote this letter in March but have waited to send it. As you know, the MA Atty. General has now filed with the First U.S. Circuit Court. Then on the anniversary of TMI, U.S. Senator Bernie Sanders (VT) introduced legislation (S-1008) to increase the ability for governors and state utility boards to request the NRC to grant *Independent Safety Assessments (ISA)* based on today's new realities.

But my March letter still holds:

Because Vermont Yankee is so near his state, I support the Massachusetts Attorney General's request that the National Environmental Policy Act (NEPA) include in its decision-making documents the consideration of the impacts of intensely radioactive spent fuel rods.

These rods come grouped in assemblies which hang inside a water-filled cooling pool. After cooled, they are down-loaded in *short* term dry-casks for transportation to Yucca Mountain. One railroad dry cask contains the equivalent of 250 Hiroshima bombs. According to a talk, delivered in 2005 by Independent Consultant Dr. Marvin Resnikoff – nuclear physicist for the Radiation Waste Management Associates – the Vermont Yankee pool had back then enough fuel assemblies to fill 60 to 80 of this type of dry cask.

The NRC's mission is to protect the environment and the public health from the effects of ionizing radiation, whether it be from reactors or from the highly radioactive spent fuel they produce.

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The Federal, long term nuclear waste facility at Yucca Mountain, Nevada is still in construction and already over committed. In September, 2005, there were 210,000 tons of spent fuel waiting to be disposed of. Yucca Mountain is designed to accept only one-third of that, i.e. 70,000 tons. There is no prospect for the long term storage of the other 140,000 metric tons. The Vermont Yankee, between 2005 to the end of first license, 2012, will have produced an additional 140 metric tons of spent fuel assemblies. By 2012 many cooled assemblies will have been removed and stored in short term dry cask canisters on site. If Entergy is given the go-ahead by the Vermont State Legislature, the Vermont Yankee will be permitted to operate until 2032. It will have produced *an additional 540 metric tons of spent fuel*. By that time, with the spent fuel build-up at the other 102 reactors across the nation, many more long term storage sites must be accepting.

The Massachusetts Attorney General, and other attorneys general across the country, are concerned about how the short term packaging will endure the elongated waiting period. The Connecticut River could rise and flood the area. With global warming this is a growing concern. If these casks eventually join the other reactors' casks on the long trip to Nevada, they will have to be further hardened before transport. How will they be reinforced? How much will it cost? Who will pay?

These are "new and significant problems" that pertain to storage. They have emerged during the 35 years of Vermont Yankee's first license period. They need to be solved before the Vermont Legislature can consider a twenty year relicensing. I list just two:

1. It is new and significant that there is still strong resistance against storage at Yucca Mountain. Other states, New Hampshire, for example -- have flatly refused to take it. Over time, "short term" dry cask storage units stored near reactors will deteriorate. A nation stressed by global warming reparations will be hard put to restore all these storage units, and there may be moisture seeping in, due to a recent flood. Highly radioactive Strontium, Cesium, Plutonium, etc. may be already breaking through the cask barrier.
2. It is new and significant that polarization against the U.S. has increased since the second Iraq war and attack from the air is of greater concern. The Vermont Yankee storage pool is seven stories high and is hardened against impact from the side but its roof is not hardened to withstand a plane crash or bombing.

In conclusion, Mr. Secretary of the NRC, I, for one, urge that NEPA's decision making documents include deep scrutiny of the new, significant and very possible impacts of spent fuel storage, namely:

1. -- an attack on the cooling pool from above -- causing the pool to drain, the hot fuel assemblies to be exposed, the radioactive assemblies' zirconium cladding to burn, and the ionizing radiation to be released in smoke causing death and a sharp increase in cancer

throughout Vermont into lower Quebec, and into New Hampshire, most of central and western Massachusetts and northern Connecticut;

2. -- the growing need, since global warming, for dry-cask units to be kept on high ground, completely isolated from a flooding Connecticut River or any other flood water seepage, in *hardened* bunker pits with regular human monitoring to prevent diversion by ground attack; and
3. -- the assurance that the long trips to Yucca Mountain be safe and secure, without use of tunnels where fires could be compounded as in the recent Baltimore tunnel fire. .

In conjunction with the above, please, Mr. Secretary, *support the exclusion of the Waste Confidence Rule, so that the NRC will be in the position to take on, without delay, its responsibility for the security and safety of spent fuel rod assemblies.* All this because the mission of the NRC is, first and foremost, public health and safety.

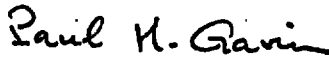
Thank you for considering this letter.

Sincerely,



Eleanor I. Gavin, RN, retired

I have been working all my life on the design of nuclear reactors, under the assumption that Yucca Mountain would be ready on time. Now I realize that it is not and is already over committed. I would like to see all reactors reach their end of life safely, and see that the final spent fuel disposal is secured.



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