

ANBEX

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April 18, 1988

Mr. Eric S. Beckjord
Director
Office of Nuclear Regulatory Research
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Beckjord:

I am in receipt of your April 5, 1988 letter in which you note my opposition to existing NRC policy regarding stockpiling or predistribution of potassium iodide (KI) to the general public. Your letter states that NRC policy is "based upon an assessment (NUREG/CR-1433) which examined a full range of accidents," and that "The probabilities of such accidents were taken from the Reactor Safety Study (WASH-1400)..." Your letter provides soothing assurance that you have "carefully considered the policy regarding KI in light of all available information, and have concluded that no change is warranted."

What your letter fails to mention, however, is that following highly critical reviews of WASH-1400 by both independent and government groups, the NRC (in January, 1979) officially repudiated this study and the optimistic probability calculations upon which current KI policy is based, noting "The Commission does not regard as reliable the Reactor Safety Study's numerical estimate of overall risk of reactor accidents."

In fact, the NRC's own review group concluded that the probability calculations in WASH-1400 were so uncertain as to be virtually meaningless. "Many of the calculations are deficient when subjected to careful and probing analysis," they wrote. In truth, on the question of KI, WASH-1400 is of limited value, and the portions of NUREG/CR-1433 that are based on its probabilities are worthless.



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Given that you undoubtedly know all about the repudiation of WASH-1400, I find it disturbing that you continue to quote it and NUREG/CR-1433 as a reason for current KI policy. Equally astonishing is that in spite of the fact that since the time of its publication (and its admission of a 50% chance of a severe core accident in the next 20 years) we have seen:

- The occurrence of Three Mile Island, and numerous other accidents or near accidents considered "impossible" by WASH-1400, including an actual "Class Nine" event and the consequent spread of massive amounts of radioactive iodine over thousands of square miles of Europe,
- A recognition that other accident initiators not considered in WASH-1400, such as earthquakes, generic design flaws, instances of faulty construction, unreliable operator performance (from those who fail competence tests to those who sleep on duty), and the threat of terrorism and sabotage, can not be ignored, and
- The entire area of inexplicably poor plant performance and reliability, including "aging" and embrittlement"

yet you are somehow able to conclude that the chance of a serious accident is less than originally estimated, and that WASH-1400 was "unduly pessimistic." Totally ignoring experience, you now claim that a serious accident is only 10% likely to occur.

But even if one disregards your apparent lack of concern regarding the need for measures to mitigate the impact of an accident with a "10%" chance of occurring, I can not avoid the feeling that your agency is essentially attempting to mislead government officials and the public on the question of KI.

For example, in NRC correspondence concerning the benefits of KI, you consistently fail to mention your own agency's assessment of the value of the role it played at Chernobyl where it was quickly distributed following the accident. As reported in NUREG-1250, the NRC concluded (based on thousands of actual measurements among people who were exposed to radioiodine released from the plant), "The use of KI...was credited with permissible iodine content...in 97% of [those] tested." How many thousands of injuries were avoided by the use of KI can obviously not be quantified with precision, but surely the number is a large one. For the NRC not to acknowledge this fact when ostensibly giving a fair review to the question of KI is a deliberate deception.

Further, NRC statements regarding the Soviet accident consistently emphasize the "known differences between the Chernobyl reactor and U.S. plants" but never discuss similarities in design, procedures, philosophy, and optimism regarding safety considerations which possibly outweigh the differences. In addition, your references to the question of "containment" generally suggest and support the erroneous, but widely held, notion that there was no containment at Chernobyl. In fact, you know this was not the case. The containment structure at Chernobyl was designed to withstand the "maximum credible accident" the Russian designers expected, and it failed because the accident exceeded the engineer's expectations. That is precisely what we need to worry about in this country, where an NRC study could not rule out containment failure in our reactors, and at least 39 of them are similar to the one at Chernobyl and are highly suspect.

In light of the overwhelming evidence of the value of KI, the NRC's continuing refusal to require regulations to assure its availability in the event of an accident, makes the statement in your letter that "the NRC places safety as its highest priority" a mockery. If safety is important, I ask you to consider what the medical implications of Chernobyl would have been had the Soviet authorities not previously had the good sense to stockpile KI and to quickly distribute it at the time of the accident. Certainly, the facts of the episode clearly suggest that without its use, tens of thousands of thyroid cancers and other abnormalities would otherwise have occurred.

What will it take for the NRC to be convinced that Americans should be afforded this same protection?

Sincerely,

Alan Morris

cc: Senator Bill Bradley
Senator Frank Lautenberg
Senator Orin Hatch