

ANBEX

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February 17, 1988

Mr. Victor Stello, Jr.
Executive Director for Operations
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Stello:

Senator Bradley's office has sent me a copy of your January 15, 1988 letter to him regarding my proposal concerning the question of potassium iodide (KI), which included a copy of your document, Draft NUREG-1251, "Implications of the Accident at Chernobyl for Safety Regulation of Commercial Nuclear Power Plants in the United States". Please be aware that I have previously submitted comments on this, a copy of which is attached.

I find it is highly disturbing, Mr. Stello, that the NRC resolutely refuses to change its position on KI in spite of the events at Chernobyl. As noted in the attachment, I believe NUREG-1251 is a poorly reasoned document since, among other reasons, the cost effectiveness analysis it is based on (NUREG/CR-1433) is outdated and obviously incorrect. This analysis essentially assumes that serious core accidents are impossible, and are not to be expected more frequently than about once in a thousand years.

I am certainly not the first to note that this assumption must be dismissed in light of experience. In only about thirty years, we have already had one "impossible" catastrophic accident (Chernobyl), other large "impossible" releases, and too many ("near impossible") known close calls and near misses to ignore.

But your letter does ignore them. Further, you support the curious notion that there is something inconsistent about the use of KI along with evacuation and sheltering strategies.

In fact, Chernobyl demonstrated that KI is a required compliment to these strategies. People sheltering or being evacuated could be at extremely high risk if, as occurred at Chernobyl, the evacuation routes are also in the path of the radioactive plume. In the US, with many more private cars and consequent less control by officials, the situation could be even more dangerous than it was at Chernobyl. Indeed, the specter of thousands of Americans stuck hopelessly in traffic during an evacuation, while radiation drizzles down around them, is both frightening and real.

What protected many at Chernobyl was the KI taken prior to the evacuation which the Russian authorities had the good sense to distribute early from existing large stockpiles. But surely you know this since the NRC, itself, unequivocally reported it (in "Report on the Accident at the Chernobyl Nuclear Power Station" NUREG-1250):

As you stated:

The Russians were apparently well prepared for large-scale distribution of KI tablets to the general public....Thousands of measurements of I-131 (radioiodine) activity in the thyroids of the exposed population suggest that the observed levels were lower than those that would have been expected had this prophylactic measure not been taken. The use of KI by the Pripjat population in particular was credited with permissible iodine content (less than 30 rad) found in 97% of the 206 evacuees tested at one relocation center. It is also important to note that no serious side effects of KI use have been reported.

Unfortunately, your letter to Senator Bradley on the question of KI fails to mention this assessment of its benefits. Worse, in addition to the omission, your letter misleads the Senator by suggesting that the value of KI during Chernobyl (which, as noted above, was extreme and beyond doubt), "is at best an assumption."

I believe you also owe the Senator some clarification on other aspects of your letter. For example, you state, "The NRC has not concluded that a major nuclear power accident is highly likely to occur in the United States." However, I refer you to The New York Times of April 17, 1985 (and verified in numerous other publications and in person to me) that "Mathematically, the chance of a meltdown at a nuclear reactor somewhere in America in the next 20 years is almost 50-50 according to the Nuclear Regulatory Commission."

I would be disturbed to learn that you do not consider these probabilities "highly likely" and worthy of some kind of advance planning. Further, I am less than reassured by the statement in your letter that NRC probability calculations are "characterized by large uncertainties." While I recognize the difficulties in predicting accidental occurrences, does this mean that we are to disbelieve your numbers when they portend disaster? Should we believe them only when they predict good news, such as the "once in a thousand years" estimate referred to earlier?

For the NRC to continue to deny the need to assure adequate supplies of KI is a dereliction of its responsibility in the face of overwhelming evidence. Clearly, it is insufficient for you to place the burden of KI acquisition on local authorities, since, as you certainly must recognize, this will effectively guarantee that none will be available if it is ever needed.

And yet, I am certain that you would not deny that in case of an iodine-releasing accident, one of the very first actions officials will request is rapid distribution of the drug. Of course, none will be available, and I wonder how you will respond. Will you point at some small town Mayor and say, "it's his fault?"

Obviously, everyone hopes this will never happen, but equally obvious is the fact that accidents are a credible possibility and KI represents one extremely valuable defense. For the NRC not to demand the availability of the drug represents a disregard for appropriate safety concerns. Let us hope it will not take an accident for the agency to realize this and act accordingly.

Sincerely,

Alan Morris
President,
ANBEX, Inc

Attachment