

October 19, 2012

Mr. John D. Kinneman, Director
Division of Fuel Cycle and Safeguards
Office of Nuclear Material and Safeguards

Dear Mr. Kinneman:

On November 12, 2011, I wrote to the NRC Chairman about my concern re the NRC's misuse of the national standard ANSI/ANS-8.1 , "Nuclear Criticality Safety with Fissionable Material Outside Reactors," recommendation for the Double Contingency Principle (DCP). After receiving what I considered an inadequate response from the NRC's NMSS Acting Director on December 12, 2011, I wrote to the NRC Chairman again on January 12, 2012. On February 23, Ms Catherine Haney replied to my letter. This led to a meeting in your office with you, Ms Haney, and your staff member.

As a result of this meeting, you provided me with a copy of NUREG-1520, Rev. 1. I agreed to review the section dealing with the DCP and provide comments to you. On June 7, 2012, I E-mailed my comments to you. I found that, in NUREG-1520, Rev. 1, the NRC staff did not provide proper guidance on the correct application of the DCP. In fact, many examples in NUREG-1520 contradicted the December 2009 ANS Clarification re the DCP. In a subsequent telephone conversation, you indicated that your staff did not consider the issue to be significant and did not plan to change the guidance on the DCP. You said that NUREG-1520 was scheduled for revision and would be available for public comment. At the time, I agreed to postpone further discussion until the revised draft was available for comment.

My agreement to await further discussion until the draft revision is available has haunted me because of my life long commitment to nuclear criticality safety. Hence I am writing again on this important issue. For a regulatory agency to ignore or misuse a national standard on safety defies common sense, as well as OMB guidance, on use of national standards. As I said in my June 7, 2012 E-mail, in NUREG-1520, Rev. 1, the NRC staff guidance focused on the number of controls in the safety demonstrations, but not the location of those controls. For example, two controls on one control parameter would satisfy the NRC's DCP. The national standard, on the other hand requires controls on two or more control parameters to satisfy the National Standard's DCP. In both the National Standard and in the NRC guidance, the number of controls is the same, but the location of the controls is NOT the same. In my opinion, this changes both the recognition of the risk and the actual risk in the safety programs by both the NRC staff and the NRC licensees.

To be in conformance with the national standard, the NRC staff must revise their position re the DCP. This should be done as NUREG-1520 is revised to save staff time as well as to immediately improve the regulatory effort. Fortunately, the NRC licensees would only have to revise limited

documentation to drop claims of satisfying the NRC version of the DCP. However, both the licensees and the NRC inspectors would have a better understanding of the involved risks in licensees' safety programs. I suggest that, if necessary, your staff contact the appropriate ANSI/ANS standards committees for a further guidance re the intent of the DCP.

Again, I apologize for agreeing to wait for the revision to NUREG-1520 before continuing this discussion re the DCP. We have an opportunity to correct this issue before hindsight forces us to do it. I look forward to your response.

Respectfully,

George H. Bidinger

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