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PR Reg Guide

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Somers, CT 06071 October 31, 1980

Mr. Edward C. Wenzinger Chief, Reactor Systems Standards Branch Division of Engineering Standards Office of Standards Development United States Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Wenzinger:

Thank you very much for the opportunity to review and comment on Draft 3 of Revision 2 to Regulatory Guide 1.97, "Instrumentation for Light Water Cooled Nuclear Power Plants to Plant and Environs Conditions During and Following an Accident".

I am quite pleased to note that the scope of the guide has been reduced in two ways: the variables have been restricted to those needed by the control room operator (the variable needs for personnel in other accident response facilities will be addressed elsewhere) and the variables have been restricted to those which are needed to enable the control room operator to cope with accidents (regardless of how the accident event was initiated). I believe these two changes will enable the licensees to implement the guide in a timely manner and will not result in overloading the operator with information thus decreasing plant safety.

I am disappointed that you have not yet attempted to directly reference IEEE 497 for hardware design requirements. I would strongly urge you to do so in lieu of attempting to include the information contained in that standard in this guide. I do not believe IEEE 497 is any further from finalization than ANS 4.5 is and thus you should be able to endorse it. This action would be in the interest of the public, the NRC, and the industry, since I would expect most licensees to take exception to the guide and state that they comply with IEEE 497 for the areas where the scopes overlap. This will slow down the review and implementation process unnecessarily which is not in the public's best interest. It will also consume more NRC and industry man-hours in the review and approval process which costs the taxpayers, rate payers, and stockholders will have to needlessly bear.

I would also hope that in the next revision to Regulatory Guide 1.47, "Bypassed and Inoperable Status Indication for Nuclear Power Plant Safety Systems", you will transfer that portion of Type D variables that provide information to indicate the operation of individual safety systems. The remainder of the Type D variables should become a matter for discussion in implementing your proposed rule Interim Requirements Related to Hydrogen

Acknowledged by card. 11/12/20

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Control and Certain Degraded Core Considerations, as published in the Federal Register, Vol. 45, No. 193, of Thursday, October 2, 1980. Given the interim status of your rule, it would be an unwarranted extension to include the remainder of your Type D variables in this guide.

I strongly disagree with your decision to ignore the time phases defined in ANS 4.5. This decision has led to your specifying qualification requirements (Position C.1.3) which go considerably beyond those required to protect the public health and safety. There should be no question or doubt in your mind that the adequacy of a given plant when compared to the requirements in this guide, will be a plant specific evaluation using the plant safety analysis as a basis. Prohibiting plant operation, due to lack of an over-qualified instrument does not appear to be in anyone's best interest. Over-qualifying instruments to simplify the NRC review process does not appear to be in anyone's best interest. Use of NUREG 0588 is arbitrary and thus less defensible than use of a plant specific design basis. Pending completion of the proposed rule-making on Consideration of Degraded or Melted Cores in Safety Regulation, no basis exists for your selection of qualification categories. There obviously exists the possibility that if a plant's design basis must be modified subsequent to your proposed rule-making, that some instruments will be improperly qualified (both over and under). Neither of us is clairvoyant enough to know what the results of your rule-making will be at this time. I believe this is a case where overly prescriptive requirements are premature. I believe the approach in ANS 4.5 is technically preferable at this time.

Regarding Table 2, I have the following specific comments:

Type B Variables

Neutron Flux

Degrees of Subcooling

Containment Pressure

The high end of the range is excessive. Reduce to 10^{-3} %.

Reduce to Category 3 since this only confirms other Category 1 variables.

Appears to be mis-located if Category 1 is correct or else it should be Category 3 where it currently appears, and it should also appear under the Maintaining Containment Integrity heading as a Category 1.

Type C Variables

Core Exit Temperature

This is not a technically defensible choice by itself for potential fuel breach.

alle klager