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May 24, 1997

62 FR 8785

Feb. 26 1897

ULES REVIEW & UNLY USNRC

Mr. David Meyer Chief, Rules Review and Directives Branch U. S. Nuclear Regulatory Commission 11555 Rockville Pike Rockville, MD 20852-2738

Dear Mr. Meyer

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Per the instructions in the Federal Register, February 26, 1997, page 8785-8790, concerning comments to a proposed rulemaking on a Safety-Conscious Work Environment, I wish to submit the following comments.

First, with respect to my background, I have been employed in the nuclear industry for approximately 23 years and have had a varied background with respect to my employment. I worked for the Tennessee Valley Authority from 1974 to 1989. Since 1989, I have been self employed as an engineering consultant, first, as a partner in the firm, Reliability And Performance Associates and now as the sole proprietor of Performance Technology. I have been involved in the safety analysis of both commercial and Department of Energy reactors during this time. During my work, I have been personally involved in safety issues including both sides of cases before the Department of Labor.

To summarize my comments, I do not believe that the Nuclear Regulatory Commission should proceed with establishing a rule concerning a "Safety-Conscious Work Environment." Such a rule would be counterproductive to the stated position of the NRC to become more effective in taking actions to correct adverse trends in "safety."

The proposed rule is addressing the wrong problem. The underlying problem is that there is no usable objective standard for "safety" in the Nuclear Regulatory Commission or the nuclear industry. Further comments are attached.

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Sincerely,

RD-25 Nuclear

**Bob** Christie

"When you measure performance realistically, it improves,"

(62FR 8785)

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Further comments of Bob Christie on the proposed rulemaking "Safety-Conscious Work Environment"

In order to address my major concern with the proposed rule, I wish to call to the attention of the present staff of the NRC certain statements that were made in the Kerneny Commission Report in October 1979 following the accident at Three Mile Island 2 in March 1979. Being in this business as long as I have tends to imprint major events and major reports in my memory. The Three Mile Island 2 accident and subsequent reports played a major role in my development as a "safety analyst" for nuclear reactors. I believe the same is true for the NRC staff that were active following TMI 2.

1. As stated by Dr. Thomas H. Pigford in his separate comments to the Kerneny Commission Report on page 15. "...I believe that the following are some of the more important problems at the Nuclear Regulatory Commission:

---Lack of quantified safety goals and objectives. When a safety concern is postulated, there is no yardstick to judge the adequacy of mitigating measures.

---Arbitrary requirements. Too many of the NRC requirements are mandated without valid technical back-up and value-impact analysis."

2. As stated in the overview on page 9, ..."We note a preoccupation with regulations. It is, of course, the responsibility of the Nuclear Regulatory Commission to issue regulations to assure the safety of nuclear power plants. However, we are convinced that regulations alone cannot assure safety. Indeed, once regulations become as voluminous and complex as those regulations now in place, they can serve as a negative factor in nuclear safety. The regulations are so complex that immense efforts are required by the utility, by its suppliers, and by the NRC to assure that regulations are complied with. The satisfaction of regulatory requirements is equated with safety. This Commission (Kemeny) believes that it is an absorbing concern with safety that will bring about safety -- not just the meeting of narrowly prescribed and complex regulations."

In my opinion, these observations are just as valid today as they were 18 years ago.

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Today, neither the majority of the staff of the NRC nor the majority of the staff of the utilities use the "Safety Goals for Operating Nuclear Plants" published by the Nuclear Regulatory Commission in 1986. In general, neither the majority of the staff of the NRC nor the majority of the staff of the utilities acknowledge the existence of these safety goals. In addition, the regulations of the NRC are even more complex today than they were 18 years ago.

This proposed rule making concerning "safety-conscious work environment" is an example of the underlying problem with "safety" at commercial electric nuclear generating units. We have no quantified safety goals and objectives which are used to determine the adequacy of "safety" or trend "safety" at commercial electric nuclear generating units. We "thrash around" and try to define a "safety-conscious work environment" because certain people believe that this will help make things easier. From my perspective, having been on both sides of this subject, such an effort will only make things worse. We need to stop proposing and publishing more and more complex regulations.

The proposed rulemaking of the NRC to foster a "safety-conscious work environment" will do nothing except cause further deterioration in the morale and efficiency of both the Staff of the NRC and the Staff of the utilities. If we cannot define "safety" with quantitative, objective measures, we will not be able to define and implement a "safety-conscious work environment." Any attempt to legislate a "safety environment" will only add to "...the stifling adversary approach." also mentioned by Dr. Thomas H. Pigford on page 15 in his separate comments to the Kemeny Commission Report. This legislative attempt to foster a safety-conscious work environment will further "...inhibit the interchange of technical information between the NRC and industry. It (the adversary approach) discourages innovative engineering solutions."

The most effective approach to ensure that "safety" is not deteriorating at a commercial electric nuclear generating unit is for the NRC and the utilities to agree on common "safety" criteria which can be objectively and quantitatively measured. The NRC and the utilities should then agree on the methods to measure and the methods to trend the "safety" criteria at each nuclear unit in the United States. In my opinion, this is best done by using the NRC "Safety Goals for Operating Nuclear Plants" as published in 1986. Let us get this work done before we proceed any further in adding to the complexity of regulations. An effort to define common safety criteria will be more rewarding both to the staff of the NRC and the staff of the utilities than any attempt to foster a "safety-conscious work environment."

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