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BRANCH

Mr. Samuel J. Chilk
Secretary of the Commission
Nuclear Regulatory Commission
Washington, DC 20555

ATTN: Docketing and Service Branch

RE: 10 CFR, Parts 50 and 55
Degree Requirements for Senior Operators at Nuclear Power Plants

Dear Mr. Chilk:

Having read your advance notice of proposed rulemaking on Degree Requirements for Senior Operators at Nuclear Power Plants, I wish to make the following comments, not only on the proposed degree requirements, but also on the present system being used to examine candidates for RO and SRO licenses.

If the examining process was improved, the result would be increased knowledge for operators.

The first step would be to improve the examiner. Because a man has a degree, he can become an examiner, but this alone does not make him qualified to be that examiner. He should be required to have a SRO license obtained from an operating nuclear power plant. This license should be a "real" license and not some type of special license. He would then have the knowledge and know-how to administer a true examination, hence be able to determine if a person has the proper knowledge necessary for licensing at a RO and SRO level.

The second step would be to improve the written examination process. The present exam is six (6) hours of fill-in-the-blanks, true/false, multiple choice and some essay-type questions. These questions do not prove that the candidate has the proper understanding of the subjects that he is being examined on. Exams modeled after the essay-type administered in the late 1960's and early 1970's should be used. These examinations were very comprehensive and took 10-12 hours to complete. This is a long period of time but could be administered in two six-hour sessions over a two-day period. The essay-type exam is a better method to determine how knowledgeable a candidate really is. The candidate was also required to be examined while conducting an actual reactor startup and not a simulator startup. This, again, gives the examiner first-hand information on the candidate's capabilities. This becomes very expensive to the utility as lost revenue from electric generation, but in the interest of safety and determining true capabilities, this is a small price to pay.

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Acknowledged by card JUL - 8 1986

The following are some of the reasons why a SS (SRO) should not be required to be degreed:

1. A degree does not enhance "accident management expertise on shift" - experience does.
2. A degree does not give a person the common sense required to manage a shift of operators at a nuclear power plant - experience does.
3. A degree does not give a person the supervisory skills required - experience does.
4. Experienced reactor operators (ROs) will leave the utility and nuclear power field in general because there will be no career advancement path - loss of experience.
5. Safety will be compromised, not enhanced by the loss of experience.
6. A degreed person does not necessarily become a "company man." Case-in-point: a degreed engineer obtained a senior licensed, terminated and went to work for the NRC. A knowledgeable operator, without a degree, became a vice president of the same utility.

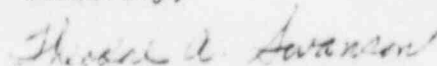
An experiment should be conducted using the present Shift Technical Advisor (STA). He or she should be a licensed SRO and assigned to a rotating shift. His only responsibility would be that of an STA/Communicator/On-Shift Instructor. This would require him to remain in and around the control room and not 10 minutes away. See how long he would be willing to work a rotating shift work schedule. This would help to determine just how long a degreed SRO would be willing to stay on shift and the amount of experience that would be retained in the control room after the 1991 date set by the commission. Another experiment would be to determine how long the experienced, non-degreed, reactor operator would continue to stay on shift when there is no career advancement path available to him. With no career advancement for the non-degreed operator, where does the licensed degreed engineer obtain the experience needed to safely manage the operation of a shift with no experience.

It would appear to me that by requiring a degree to become an operator/supervisor that the commission would be causing a compromise of safety in the daily operation of a nuclear power plant. The person who starts as an auxiliary operator and works his way up to become shift management is more qualified and experienced than someone who is degreed and moves directly into shift management. The commission would be relaxing the experience requirements, now required, prior to an operator becoming RO or SRO licensed.

I have been an operator, shift supervisor (SRO) and an instructor in the nuclear power program since 1958, both U.S. Navy and the civilian power industry and have had much experience with degreed and non-degreed personnel. If I had a choice of people who I would want working for me on shift, it would be the non-degreed, ex-Navy operators because of their training, know-how, and experience they have gained working with nuclear power plants. I feel that almost 29 years of experience cannot be replaced by a degree.

The concerns I have are the same concerns that the Nuclear Safety Oversight Committee had in 1981. Their letter to President Reagan dated April 17, 1981, and signed by the chairman and 3 members, expresses my feelings very well. The contents of that letter should be considered before making a decision about the Degree Requirements for Senior Operators at Nuclear Power Plants.

Sincerely,



Theodore A. Swanson

TAS:dcs

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