February 2, 2003

Mr. Jack Grobe
NRC
Region III 630-829-9637; fax 630-515-1078

RE: Licensure of Engineers with safety responsibilities at nuclear facilities

Dear Mr. Grobe,

I participated in the NRC public meeting on the safety culture, by telephone, on January 30, 2003, and asked the question about the relevancy of engineering licensure to the engineering related debacle at Davis-Besse. I perceive we possibly have a "ships passing in the night" type situation regarding the possible relevancy of P.E. licensure to nuclear safety at Davis-Besse, as well as in the nuclear profession in general.

The reason why licensure of engineers, in general, in the nuclear profession is not required by law is unrelated to the existence of the NRC. Licensure of engineers is done by the States, when engineering licensure laws were passed in the States, generally between 40-80 years ago, the "industrial exemption" was included, because of political realities - that no licensure laws would be passed without it.

The reason why licensure of engineers in the NRC is the exception is because of the "federal exemption," which flows from the Supremacy Clause of the U.S. Constitution - a State cannot require an employee of the federal government to be licensed , even if all other members of that profession must be in that State. This is true whether the federal employee be a Post Office truck driver or a brain surgeon at a VA hospital.

However, the federal agencies can impose on their employees a requirement that they be licensed, as required, by the States in which they work, just as if they were employed in the private sector. In other words, the federal agencies can voluntarily "waive" their "federal exemptions" to State Licensure law requirements. In that case, if the agency requires the incumbent of an engineering position be licensed, if the engineer loses his license, the agency has grounds to terminate the employee for cause.

The NRC has not, to my knowledge, made P.E. licensure a mandatory condition for engineering positions in it (there may be some exceptions). I am having conversations with Congressional staff about this requirement, that experienced engineers of the NRC become licensed, being written into the annual NRC authorization bill.

My position, as a long-time licensed P.E., long-time nuclear professional, and multiple time "prevailing" whistleblower in the U.S. Department of Energy, about workplace/public health and safety issues, is that licensure of all experienced engineers at nuclear facilities is simple common-sense and that the NRC's and industry's current posture of "it is not irrelevant" and/or "it is not required," reflects a blind spot in their thinking.

Why do I think this?

Because State Engineering Boards have equal jurisdiction and identical rules of professional conduct over all P.E.'s in their State. An engineer cannot have it both ways - if an engineer can work under an exemption, he can invoke it and forego licensure. But if the employer of the engineer, independent of State Law, requires the engineer to be licensed, the engineer "waives" the exemption, becomes a P.E., and becomes just as subject to State Engineering law and regulations as engineers required to be licensed by law. A P.E. cannot invoke the industrial exemption if a complaint is filed against him with the State Board, he has already waived it.

What does the term "nuclear professional" mean? In a more exclusive sense, it means that the individual, in addition to being accountable to his employer for his workplace competency and ethics, is also accountable to his profession and this accountability is reflected in a license or other certification which can be removed for cause by an appropriate professional body. The NRC, in licensing some specific individuals, in addition to facilities, captures a bit of this thinking. But the NRC does not license engineers at nuclear facilities. To the extent it occurs, that is the job of the State. Even though State law does not require licensure of most engineers at nuclear facilities, it does not stop the NRC and/or operating companies of those facilities from requiring it.

How might that help create and maintain a proper safety culture at nuclear facilities?

P.E. are legally required, when necessary, to "blow the whistle" about workplace/public health and safety issues. If the engineers with maintenance and operations responsibilities at Davis-Besse had been licensed, because FirstEnergy required it, during the past ten years, I suspect many of the material conditions identified there in the past year would not have been allowed to exist and persist - because the licensed engineers would realize that if they did not speak up, strongly and repeatedly, about them, they might lose their P.E. licenses and their jobs. Additionally, if they did speak up and supervisory engineers did engage in retribution against them, I do not think the Ohio Engineering Board would look kindly on it, which would be a deterrent to such retribution taking place.

Is in a panacea? No, of course not, just like licensure in other professions is not a panacea. Is it worthwhile? How can one readily justify licensure of engineers in any circumstance and not include licensure of engineers in nuclear facilities? The NRC and nuclear industry have adopted, tacitly it seems, a short-sighted view of P.E. licensure which is inconsistent, in my opinion, with their stated priority on public health and safety. Public health and safety is also the stated purpose of engineering licensure.

I would appreciate an opportunity to speak to you, Mr. Dean, or others in NRC about this. I will be in DC area this coming week (February 3-7), which is where I understand Mr. Dean works.

Respectfully,

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To: Jack Grube

From: Joe Larson

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