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OFFICE OF SECRETARY  
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August 20, 1982

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Secretary of the Commission,  
U.S. Nuclear Regulatory Commission  
Attention: Docketing and Service Branch  
Washington, D.C. 20555

DOCKET NUMBER PR-34  
PROPOSED RULE (47 FR 19152)

Subject: The Certification of Radiographers by a Third Party

Gentlemen:

The following are the comments and opinions of our management relative to 10 CFR Part 34, Certification of Radiographers and in particular the questions brought up in the Federal Register, Volume 47, Number 83, dated May 4, 1982.

Question No. 1:

Is the training provided to radiographers under the present system adequate?

ANSWER:

The answer is a very simple: YES. It is most surprising to us that this subject has not been fully addressed. First, radiography is a much broader subject than just covered by the requirements of the N.R.C., but also includes that area utilizing xray machines, etc. Industry must also meet the safety requirements, training, etc. for this area of the broad subject of radiography.

Presently most companies either have a competent staff to train their own radiographers or they send them to one of the many available industrial training programs. We, for one, have been conducting training programs in most phases of non-destructive testing, including radiography. Just as with the many other very capable firms in this business throughout the United States, the trainees are given classroom as well as hands on training under competent instructors. A second phase of our program is to train the individuals on the specific equipment which they will be charged with using.

Radiographers are presently required to certify under the requirements of the American Society for Non-Destructive Testing requirement SNT-TC-1A before being allowed to conduct radiographic examinations on boilers, pressure vessels, etc. being constructed under the A.S.M.E. Code.

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The A.S.M.E. (American Society of Mechanical Engineers) Code is the code under which all nuclear power plant components are designed, manufactured and inspected. In short, the N.R.C. requires a licensee to provide a training program which meets their requirements. Then, before one can go to work, all personnel must be trained and certified in accordance with the requirements of the A.S.M.E. Code, in accordance with A.S.N.T., SNT-TC-1A. The A.S.N.T. certifies Level III Non-destructive Testing personnel; Levels I and II are then trained and certified by the person certified as Level III. In addition to the above, there are also military certifications, State, and Company requirements.

This proposal can only add one more layer of Bureaucracy on top of it all.

Mr. Tom Gaines stated at the Oakland, California N.R.C. Public Meeting: "NDTMA cannot support any form of certification which will permit government to participate beyond the acceptance of a third party certification. In essence, NDTMA will not endorse any certification program which will cause the already burdensome level of bureaucracy to be increased". To this, I must say: what difference does it make where the burden comes from, whether it be another layer of bureaucracy or a third party, such as NDTMA? I must also say that we would have more time and money to spend on training if we did not have to waste so much of it in fighting this type of proposal.

QUESTION No. 2:

Would a third party certification program reduce the number of over-exposures?

ANSWER:

First, my answer is NO.

We are not familiar with all of the cases where overexposures have occurred; However, having been in the business of radiography for over 30 years, it has been my observation that most of the over-exposures and accidents were the result of carelessness by persons who were adequately trained, and cognizant of the proper procedures to be used, and that would, if followed, have prevented the over-exposure. There is no third party certification program that can, by contact once initially, and then every 2 or 3 years thereafter, prevent this type of accident.

The every day supervision by the employer is the only way to reduce over-exposures. It cannot be done by a third party waving a magic wand over the employee.

The Third Party Certification will have the opposite effect... it will relieve management of the responsibility for training and determining whether a person is adequately trained to work within his area, and with his equipment.

QUESTION No 3:

Would Third Party Certification motivate radiographers to work more safely?

ANSWER: No.

Third party certification would have the opposite effect. The employer would rely on the third party to determine the capability of the radiographer. There is no way a third party can determine who will work safely and who will not during a short term training program. This can only be done by personal supervision.

Third Party Certification is being put forth as the answer to the safety program; as such it would put another layer of cost on top of the already over-burdened testing laboratories and N.D.T. Programs. To stay in business, cuts would have to be made in the cost of the radiographic program and this would naturally be in the area of responsibility of management to supervise and train the employee, since this responsibility would be transferred to the Third Party. Certainly there is a limit to how much of the expenses of these programs industry can bear.

QUESTION No. 4:

What elements in the present system or in the suggested alternative are particularly desirable or undesirable? Why?

ANSWER:

There is nothing desirable in the alternative program. It will be very costly to industry without adding to the safety of the employee or the public.

Those proposing this alternative have, or had, one major interest: and that was a monopoly in the training and establishment of fees for these programs, and for the licenses. This would automatically put all other companies now in the business of training N. D. T. personnel out of business as far as training radiographers goes. Does the Government, i. e. the N. R. C. have this authority? I think not. Who will do the training and who will decide that they have the adequate qualifications to train our personnel? If this program is supported by the N. R. C. it is an admission that the present requirements of the N. R. C. and the very high costs of satisfying these programs, have all been for naught.

Presently, to obtain a license to use radioactive materials for radiography, each licensee has been required to prepare a training program to satisfy the N. R. C. Under the alternative program there would by necessity be one program. This leads me to ask if the N. R. C. believes this can and could have been done by one universal program, why have we been required to labor under the immense paperwork to prepare separate training programs? Was this just to create work for the employees of the N. R. C. ?

ANSWER TO QUESTION No. 4 (cont.)

Mr. Hopcraft in his answer to this question stated: "A great number of licenses are issued because a third party may have specific knowledge on what the licensing authority wishes to hear, and may sell this information and assist in acquiring a license". As a proponent of Third Party licensing of radiographers, Mr. Hopcraft is very naive. Has a license ever been issued when the licensee did not tell the N. R. C. what they wanted to hear?

QUESTION No. 5:

If a Third Party Certification Program is adopted, what items should be included in the standard for determining the competence of individuals to act as radiographers?

ANSWER:

For many years, each concern licensed by the N. R. C. has been required to provide a training program for use in qualifying their personnel as radiographers. These programs have had to meet the requirements of the Licensing Guide. Since each company or licensee was required to prepare these comprehensive programs to satisfy their individual requirements, they should contain all of the essential elements for qualification; but more important, who will determine the qualifications of the Third Parties?

QUESTION No. 6:

If a third party certification program is adopted, should it apply to individuals presently working as radiographers, or only to new radiographers?

ANSWER:

Certainly a Third Party Certification program should not apply to persons presently employed or working as radiographers. The cost of training and certifying these people has already been paid by the employer. How often must this be done?

There has never been a licensing program adopted without a grandfather provision that has been capable of meeting the legal challenges.

QUESTION No. 7:

If a Third Party Certification program should be adopted, should certification be for life or require periodic renewal?

ANSWER:

If adopted, certification should be for life.

QUESTION No. 8:

Would a Third Party Certification Program affect the ability of a licensee to

respond to variable manpower needs?

ANSWER:

This type of program would most definitely adversely affect the licensee's ability to respond to variable manpower needs.

Presently we conduct our own training programs, and also for other local industrial concerns. Since the cost of the program is being borne to train one, two, or three radiographers, we will often include additional personnel, although not specifically needed. This would not be possible if it were necessary to send the people to some other area where transportation, living expenses, and a tuition fee would have to be paid. The needs are not predictable sufficiently far in advance to allow for the registration of a person in a training program, and then the certification exams, in time to meet a specific peak demand. Presently it is possible to have a person or persons trained and used during short peaks in workloads, and during vacation or periods of absenteeism.

Under the Third Party Certification program this would be cost-prohibitive. The radiographic personnel would therefore be required to work overtime during peak periods. This is undesirable since more accidents occur when the people are tired or hurrying to get done.

QUESTION No. 9:

Since a Third Party Certification program would likely be based on cost recovery by a fee system, would the cost to the licensee of such a program be warranted?

ANSWER:

The cost of the present system is not warranted, particularly for the small radiographic facility, so certainly adding another layer of cost on top of this would not be warranted. This would be like buying a pig in a poke: How long will the training program be? Where would it be held? What would the tuition fee per person be? What would be the cost of transportation, living expenses, etc? This is all an 'up front' cost and on small facilities may well be the cost that breaks the camel's back.

Under the present licensing and inspection program, the fees bear no relationship to the services rendered. Unfortunately once a program like the one proposed is started, there is no way to control the cost, nor is there any incentive by the licensing authority to do so.

QUESTION No. 10:

Which alternative of the two systems is preferable: the present system, or the Third Party Certification System?

ANSWER: (to Question 10)

The present system is preferable by far, since the cost of the system is already being borne by our programs. The unfortunate facts, however, are that the N.R.C. has in the present system all of the necessary requirements to affect the control and improve safety in the radiographic process.

The way the present program is operated there is nothing done to improve safety. The program only generates paper and expenses, masquerading under the guise of safety requirements.

Our company is one of the small engineering and inspection companies that would be most severely hurt by a Third Party Certification Program. The radiographic process is a small but necessary test method used by us in our safety inspections and accident investigations. Our experience as instructors and lecturers in safety, accident investigation and training gives us the special expertise needed to analyze the cause of accidents and methods of preventing recurrences of these accidents. It is this experience that has caused us to come to the conclusions stated in paragraphs 1 and 2 of this answer.

The N.R.C. has us at a disadvantage in that we do not know whether there is a problem or not, since we are not privy to the numbers of accidents and the nature of these accidents. At one time the N.R.C., or its predecessor, the Atomic Energy Commission, sent notices out to the licensees, informing them of the accidents which had occurred and a short description of these accidents. Has this procedure been discarded, or is it that there have been no accidents? These bulletins were most helpful to our management in our periodic meetings and training sessions.

At one time I entered the names of all radiographic personnel on our license. The N.R.C. presently discourages this procedure. Why? This affords all of the controls that a Third Party or any other certification program would offer.

Since all accidents are reported to the N.R.C., after a review of the accident report and any additional investigation to determine the cause, they could take the appropriate action to prevent a recurrence. This action could, depending on the severity of any infraction of the licensing requirements, be one or more of the following:

- 1) Revocation of license
- 2) Suspension of license for specific period
- 3) Deletion of radiographer's name from license, thereby effecting a revocation of the person's right to participate in the radiographic process
- 4) Temporary suspension of radiographer from license, thereby suspending the right of the person to participate in the radiographic process for a specific period of time.
- 5) Fines assessed against the licensee.
- 6) Fines assessed against the radiographer.

The maintenance of a list of persons under suspension need only be checked to prevent the person from moving to another facility and being added to the licensee's license.

It is suggested that the N.R.C. initiate a Newsletter, giving a report of all accidents involving the use of isotopes in radiography, and the names of the licensees and radiographers involved in same. This should include the penalties issued for each infraction. This would serve many purposes with safety as the primary advantage. Management would be alerted as to the names of radiographers under suspension or whose certifications have been revoked. The types of accidents, the equipment involved, and the causes could then be used by management to train and alert their radiographic personnel how the accidents occurred, and how they could have been prevented.

QUESTION No. 11:

With respect to the two alternatives, what kind of enforcement action could and should be taken against radiographers who do not operate equipment safely, or follow established procedures? What rights should the radiographers have with respect to such enforcement action?

ANSWER:

Third Party Certification should not be adopted. Therefore enforcement should be within the framework of the existing regulations. This can adequately be implemented as stated in answer to Question 10.

With respect to the rights of the radiographer and the licensee, both should have the right to be heard before a panel which should include representation from management, radiographers, and the N.R.C.

QUESTION No. 12:

Would a small licensee, because of its size, bear a disproportionate, adverse economic impact under a Third Party system?

ANSWER:

There is no question that the small licensee will bear an adverse economic impact just as they do under the present system. It will be difficult, if not impossible for some to continue in business if another layer of costs is imposed on us.

QUESTION No. 13:

Re: Cost of Third Party Certification.

ANSWER:

The cost would be prohibitive.

In summary, we are very much opposed to the adoption of another layer of control for the reasons stated above, and also the following :

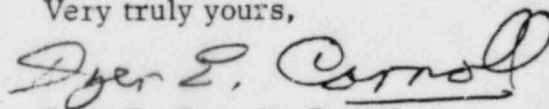
It is difficult to understand the need for another control program when the proponents of the Third Party system agree that the training of radiographers under the present system is adequate.

There must be a feeling that the present system is not working effectively, but there is nothing mentioned about abolishing this system in favor of the Third Party system. There is no reason to believe that the Third Party Certification Program will be any more effective than the present system. Can we, then, expect still another program superimposed on top of the Present System and the Third Party System if it, too, is found ineffective?

Mr. Hopcroft, talking for the NDTMA, in answer to Question no. 11, states: "To date, regulatory bodies have considered that management is basically responsible for every action of every radiographer". As management of a small licensee, I ask: "Who should be responsible"? The answer is, definitely, "Management". Was it NDTMA's intention to have the Third Party Certification organization assume some of this responsibility? Under a Third Party Certification program, if we are involved in an accident resulting in a legal action, we will guarantee that the Third Party will be standing in the court room with us.

We definitely believe that the present system is adequate, as it is now being operated. If, however, more control is deemed necessary, the present system can be improved along the lines suggested in the above answers. We would be most happy to cooperate with the N.R.C. to establish the guidelines and implementation of the necessary improvements.

Very truly yours,



Dyer E. Carroll, President  
CARROLL ENGINEERS, INC.

DEC/bet.

CC: Vice President George Bush  
Commission on Federal Paperwork

Senator Edward M. Kennedy  
Senator Paul A. Tsongas





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Secretary of the Commission  
US Nuclear Regulatory Commission  
Washington, DC 20555

DOCKET NUMBER

PR-34

PROPOSED RULE

(47 FR 19152)

Attn: Docket and Service Branch

Gentlemen:

My name is Jon P. Vorhees. I am the Assistant Radiation Safety Officer for Pittsburgh-Des Moines Corporation, Western District. I attended the meeting held on June 15, 1982 regarding third party certification of radiographers. I would like to take this opportunity to express my views and make some comments.

During the meeting, it appeared the commission had already decided third party certification was the way to go; however, they needed suggestions on how to go about setting up the program. I am not totally opposed to third party certification. In the case of a "mom & pop" operation, where training and radiation safety education may be at a minimum, third party certification may be effective. Incident rates and/or the size of the company could act as the determining factor of whether or not certification would be required.

I do not feel that third party certification is the answer to the lowering of the incident rate. In the Federal Register, dated May 4, 1982, the NRC stated "Investigations of radiography over exposure.... are the result of the radiographer not following established operating procedures. The most common procedure violated is the failure to perform a physical survey after each exposure to verify that the source has been returned to its safe storage position."

Almost anyone can pass a written test, but that is not to say they will follow or practice what they know. Third party certification will show that a radiographer can pass a test. It will NOT show that a radiographer will follow procedures while shooting in the field.

Our program complies with and in many cases, surpasses the requirements of our California agreement license. The management is very concerned with training and safety and this concern is transmitted to the field radiographers. Our proof of success can be seen in our low (if any) incident rate.

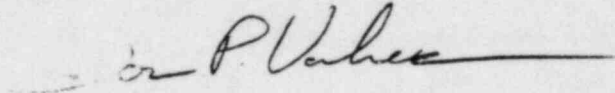
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add: Janga Jones  
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Secretary of the Commission  
August 23, 1982 - Page 2/2

I do not feel that we should be penalized by having to bear the cost of third party certification of our radiographers when our training and safety program has proven good results.

Very truly yours,



Jon P. Vorhees,  
Assistant Radiation Safety Officer  
Western District

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