



BUCKEYE STEEL CASTINGS

2211 PARSONS AVENUE • COLUMBUS, OHIO 43207 • 614/444-2121

DOCKET NUMBER

PR-34

37

July 2, 1982

PROPOSED RULE

(47 FR 19152)

Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Docketing and Service Branch

Gentlemen:



RE: Federal Register; Vol. 47, No. 86; Tuesday, May 4, 1982.
Advance notice of proposed rulemaking by the Nuclear
Regulatory Commission to require Third-Party Certifi-
cation of Radiographers.

The subject proposal has been reviewed at this facility, and it is Buckeye Steel's position that it would be best to continue with the present system of permitting radiography licensees to train and designate their own radiographers. That statement is made in view of the fact that Buckeye Steel has continuously operated a cobalt 60 source laboratory for seventeen years without a single incident of overexposure.

It is our contention that a successful safety record is not based upon the quantity of initial instruction and certified documentation, but rather the quality of the training program combined with the continual emphasis on proper safety and operating procedures. We agree that the initial training program should include a certain amount of uniformity so that each radiographer is familiar with the essential parts of 10 CFR. However, the common thread of uniformity should be insured when the licensee submits his training program for qualifying radiographers. Before approval is granted, the NRC staff should ascertain whether the submittal adequately covers all pertinent areas. The remainder of the training should be flexible so that each radiographer is trained in each location's unique operating and emergency procedures.

We believe that a third-party certification program would not motivate radiographers to work more safely, nor would it reduce the number of over-exposures in the industry. That can only be accomplished by a concerted effort by licensees to continually stress the importance of surveys and other safety procedures to their radiographers. The third-party certification program would be an unfair and costly penalty to those licensees who have demonstrated their loyalty and support to an effective safety program.

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Acknowledged by card... 7/9/82...mdv

Sincerely,

Craig A. Holman, P.E.
Manager, Technical Services

CAH:rw

DS10
James Jones
5650 NL

CP&L

Carolina Power & Light Company

July 6, 1982

DOCKET NUMBER
PROPOSED RULE PR-34 (40)
(47 FR 19152)

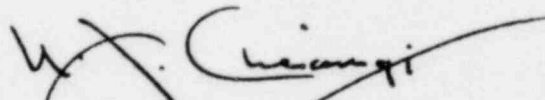
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DIA
Docketing Branch

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

Dear Sir:

Attached please find our comments involving proposed rules for
Certification of Industrial Radiographers by third party.

Yours very truly,



N. J. Chiangi - Manager
Engineering & Construction
Quality Assurance/Quality Control

NJC/ecc

cc: Mr. H. R. Banks
Mr. C. R. Osman
File

DS10
5650 NL
James Jones

Acknowledged by card... 7/9/82 m.d.v

Invitation to Comment

Comments concerning the desirability of establishing a third-party certification program for certifying radiographers are invited. Comments are specifically solicited concerning the alternatives described in this notice. Suggestions of other alternatives, and estimates of costs for implementation of the programs, are encouraged.

In light of previous discussion, the NRC is particularly interested in receiving comments concerning the following:

1. Is the training provided to radiographers under the present system adequate? See attached comments.
2. Would a third-party certification program reduce the number of overexposures in the radiography industry? See attached comments.
3. Would a third-party certification program motivate radiographers to work more safely? See attached comments.
4. What elements in the present system or in the suggested alternative are particularly desirable or undesirable? Why? See attached comments.
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? See attached comments.
6. If a third-party certification program is adopted, should it apply to individuals presently working as radiographers or only to new radiographers? See attached comments.

Comment No. 1: The training provided by our organization is adequate as evidenced by 3-1/2 years of safe operation using up to five (5) industrial radiographic sources by as many as twenty-four (24) different radiographers. These twenty-four radiographers came to us with varying lengths of previous experience, having received initial radiation safety training and qualifying work experience under other license safety training programs. The training organizations were commercial shipyards, U. S. Military, Vo-Tech institutions and commercial radiographic testing service companies.

While we cannot speak to the adequacy of all licensee training programs, it appears to us that personnel coming to us from reputable organizations are knowledgeable in radiation safety requirements and performance. Some of the individuals who have worked under our license came from small "competitive bid companies" and during the practical demonstration portion of our industrial radiographer certification examination (which is separate from and is a pre-requisite to our ASNT-type Level I/II radiographer certifications) seemed apt to be less cautious, although not unsafe in the use of industrial RT sources. Because of the structure of our industrial radiographer qualification/certification program, this "aptness to be less cautious" was by design detected and corrected early in their association with CP&L with verification of their continued safety awareness accomplished through supervisory surveillance of their performance in actual field radiographic examination activities.

All of the previously trained individuals were and continue to be aware of basic NRC/State of North Carolina requirements for the safe use of the radiographic equipment and once trained under our program requirements are aware of our commitment to operate the equipment safely in accordance with our approved operating and emergency procedures.

Comment No. 2: As was mentioned in the discussion to the "Invitation to Comment" and with which we agree, the majority of the over-exposures are the result of a failure by the radiographer to follow established operating procedures and specifically the failure to perform a physical

radiation survey after each exposure to verify the source has been returned to its safe storage position. It is our experience that this failure is normally not the result of "bad" training but rather "bad" or casual attitudes on the part of the radiographers. It is our judgement that the type of individual who has in the past and now continues to cause the over-exposure incidents would continue to have the same attitude and thus practice the same "short-cutting" of physical survey requirements. It is also our opinion that a third party certification program would not reduce over-exposures in the radiography industry.

Comment No. 3: It is our opinion that a third party certification program would not motivate radiographers to work more safely. Adding a third party would not increase "Safety" within radiographic activities. This motivation must be inherent within the radiographer regardless who or how he is certified.

Comment No. 4: Concerning the present system, the foundation element of licensee responsibility for all aspects of his approved program among which are responsibility for the conduct of training, determination of radiographer competence and accountability for radiographer performance is highly desirable. It is our feeling that under a third party certification program, radiographers could tend to view accountability for their radiography performance to be to the NRC/agreement state (via the third party agency) rather than to the licensee who pays their wages and under whose license/safety program they work.

It must be acknowledged that a desirable outgrowth of a third party certification program would be the establishment of a standard for determining the minimum qualifications and thus certification of industrial radiographers. However, it is felt that such a standard and its resulting effects could be obtained without a third party certification program by revision of the current NRC/agreement state regulations as discussed in our response to Question 5.

Comment No. 5: We do not feel that the establishment of a third party program to determine the competence of individuals to act as radiographers is necessary. We perceive that much of the concern on the part of the NRC/agreement states regarding the need for third party certification stems from an apparent lack of determinable uniform requirements (e.g., a standard) between license programs for qualification/certification of individuals to act as industrial radiographers/radiographer's assistant. As has been experienced, when NRC regulatory guides (or other regulatory documents) are not specific in details of what is to be accomplished and how, interpretation by regulatory personnel in different regions and even within the same region frequently result in significant differences between "acceptable solutions" to the same requirements. The same would seem to hold true on the part of those who prepare/submit program descriptions (e.g., licensee applicant) and those who review the programs for NRC/agreement state requirements for radiographic training/qualification/certification.

It is felt that a revision of NRC/agreement state regulations for the training/qualification/certification of radiographers and radiographer's assistants should be undertaken so as to specify the following:

- minimum number of hours of organized training.

- minimum number of weeks or months of actual work time experience in radiography activities as a radiographer's assistant to qualify for consideration as an industrial radiographer.

- Specific requirements for radiographer/radiographer assistant qualification/certification examinations to include written, close-book examination (with minimum number of questions specified) on NRC/agreement state regulations, license requirements, and licensee operating and emergency procedures, and a practical demonstration of the individual's ability to operate radiographic equipment safely and in accordance with the licensee's approved operating and emergency procedures.

Comment No. 6: As stated in our response to question 5, we do not feel a third party certification program is necessary. However, we would expect that subject to preparation and issuance of a detailed NRC/agreement state standard for training, qualification and certification of radiographers/radiographer's assistants as addressed in our response to question 5, each licensee would be required to revise his existing program description/commitments to meet the new minimum standards, and then re-train, qualify and re-certify any/all radiographers/radiographer's assistants as necessary to meet their new program commitments/license conditions.

Comment No. 8 : The effect of a third party certification program on the ability of a licensee to respond to variable manpower needs would depend on the schedule established by the third party certification agency (or agencies). If the examination/certification services were offered on essentially continuous basis, then the impact on ability to respond to variable manpower needs would be minimal. If the agency offered examination/certification services on a scheduled basis (such as quarterly or three times a year), then the impact on variable manpower needs could be significant.

Comment No. 9: As noted before, we do not favor a third party certification program and thus, do not feel that the cost recovery by an additional fee system would be warranted. The phrase "additional fee system" is used in as much as the NRC and many, if not all, of the agreement states have or are instituting a fee system for license issuance and renewal. The justification given for the license fee systems has and continues to be the need for funds to cover the administrative costs of licensing and to provide funds for an adequate level of inspection and enforcement activities. It is our feeling that a more vigorous field inspection and enforcement program (as recommended in item D to our discussion for question 10) would provide the NRC/agreement states the means for determining "the training and knowledge of the majority of individuals conducting radiography" which is the missing element to the apparent and acknowledged current practice of only reviewing records.

Comment No. 10: While we feel that our industrial radiography program, which was structured under and operates within the present regulatory licensing system, is completely successful, on balance for industry wide application, neither of the two alternatives listed (e.g., present system, third party certification) is preferable. Rather we would recommend retention of the "present system" philosophy (e.g., license responsibility for the program) with incorporation as a minimum of the following modifications:

- A. NRC/agreement states revise the training requirements for industrial radiographer/radiographer assistant so as to be specific in both topics to be covered and the minimum number of hours/fractions of hours which must be spent on each training topic or groups of training topics.
- B. NRC/agreement states establish a minimum work time experience requirements for qualification as an industrial radiographer.
- C. NRC/agreement states establish requirements for auditable records of training, work time experience and examinations. Require that copies of detailed training course outline(s) and examinations be submitted with the license application.
- D. NRC/agreement states increase the number of inspections per licensee per year, and expand the inspections to include not only records review but also discussions/oral questioning of individual radiographers as a means to assess the radiographers' working knowledge and understanding of safety rules and practices, and unannounced audits/observations of radiographers "in action" as a means to assess actual radiographer performance.
- E. NRC/agreement states levy fines against employers whose radiographer employees cause unplanned exposures as a result of violation of safety rules and regulations.

As a suggested alternative, if the NRC/agreement states/licensing/enforcement agencies want to provide adequate or uniform general training, they provide a lesson plan for instructors or a programmed instruction manual available to licensees and require each licensee to maintain on file a statement signed by each radiographer that he has read and understands the content of the instruction manual.

Comment No. 11: In keeping with our position that the responsibility and therefore accountability for all aspects of his industrial radiography program should remain with the licensee, any enforcement action for unplanned exposures which are shown to result from the willful failure of a radiographer to follow the licensee employer's approved operating and emergency procedures should be taken against the licensee employer of the radiographer involved. The fact that a radiographer would willfully violate a critical radiation safety aspect of an operating and emergency procedure (such as failure to conduct a physical radiation survey) indicates a probable breakdown or failure on the part of the licensee's responsible Management and supervisory personnel to convey to and make radiographers very aware of the licensee's intolerance with safety violations in general and willfull violations in particular. When dismissal of the radiographer is determined to be appropriate by the licensee and concurred with NRC/agreement state inspection and enforcement personnel, then the identity of the radiographer should be published in the NRC/agreement states report and/or notice of industrial radiation incidents. It is to be realized that all "violations" of operating and emergency procedures would not warrant radiogrpaher dismissal (e.g., the use of an outdated source utilization log sheet form, inadvertent failure to transfer the dosimeter and/or film badge from shirt pocket to tee-shirt or trouser belt when hot weather prompts removal of the outer shirt or jacket, etc.). It would be necessary for a licensee to decide upon, publish and make all radiographers aware of the disciplinary actions which will be taken for the various types of "violations". As in any case of apparent violation of rules/regulations, the incident and all relevant circumstances should receive a fair and impartial investigation and evaluation to determine whether the radiographer's violation was willful or non-willful.

Comment No. 12: We are not in a position to evaluate the economic impact of a third party certification requirement on a small commercial licensee. However, we can make some estimates relative to our situation (investor-owned electric utility) which would also apply to any licensee organization. It is our judgement that the initiation of a third party certification program would not reduce or eliminate the current personnel support needs and expenses for ensuring an effective and safe radiography program, but would rather add an expense for an activity that is now performed in-house. Each individual would still have to be examined in the specific requirements of our license/program thus, we would end up with two separate examination activities which are now handled in a single, coordinated overall training, examination certification activity. While the total expense for a third party certification is not known, it could include the certification and/or re-certification fee by the third party agency, travel and living expenses for two and possibly three days (depending on location of the third party agency, travel distance, travel connections, etc.) plus the lost inspector production time consumed by travel. This total multiplied by say sixteen radiographers would be considered as an operating expense and thus contribute to higher electric rates, with no guarantee of a safer radiographic program.