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(59 FR 9429)

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March 7, 1994

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Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

Attention: Docketing and Service Branch

Re: Proposed Rule Regarding Licenses for Radiography and Radiation Safety Requirements
for Radiographic Operations


Dear Sir or Madam,

In conversation last Friday with Ms. Mary Thomas of your office, it was discovered that my comments on the October 15, 1992 Petition for Rulemaking from the International Union of Operating Engineers Local 2 had never made it into the review process. Please find attached a copy of these comments for your consideration now that a rule has been proposed.

Included in the proposed rule are additional regulations beyond those discussed in the previous petition for rulemaking. I wish to express my general support for these additional regulations, with only two exceptions. First, I believe that if an individual has spent a number of years (possibly 3?) administering a radiation safety program which has been free from significant problems, then that individual should be allowed to continue as RSO even if he or she does not have the full 2000 hours of hands-on experience. Second, the wording in 34.47(a)(1) should be "At least one pocket dosimeter must ...", and "Additional pocket dosimeters with extended ranges may be worn for informational purposes only, but shall not be used to determine daily exposures". Later, in 34.47(d), corresponding wording should be changed to "If an individual's highest reading pocket dosimeter...". This would allow a determination, for example, that a dosimeter had gone off scale because it had been dropped rather than because an unusual amount of radiation had been received.

If I may provide any further information, please feel free to contact me at (304) 357-2378.

Sincerely,



David E. Adler, Radiation Safety Officer

attachment

copy(w/attachment): Mary Thomas
U.S. Nuclear Regulatory Commission
Mail Stop NL/S - 139
Washington, DC 20555

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COLUMBIA GAS

Transmission

March 25, 1993



Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Docketing and Service Branch

Re: Docket Number PRM-34-4

Dear Sir or Madam:

Columbia Transmission, a Delaware corporation with its headquarters in Charleston, West Virginia, is a wholly-owned subsidiary of Columbia Gas System, Inc. It is engaged in the purchase, storage, transmission and sale of natural gas at wholesale for resale in interstate commerce to 72 affiliated and non-affiliated retail distribution companies in eleven states and the District of Columbia. Columbia Transmission handles gas for about 1,000 transportation customers. It is one of the largest interstate natural gas pipeline companies with approximately 12,400 miles of transmission pipeline and approximately 6,500 miles of gathering pipeline.

Columbia Transmission had an in-house radiography program for 23 years until its termination for economic reasons at the end of 1992. During this time, we typically operated with one-man radiography units, and had no problems attributable to this mode of operation. Prior to program termination, the author of this letter directed the program, and still maintains the title of "Radiation Safety Officer". This letter was written in conjunction with the assistant R.S.O., himself an exemplary radiographer for nearly 20 years.

This response expresses opposition to the referenced petition for rulemaking. Specifically, the proposal is at best unnecessary and burdensome. At worst, the proposal could jeopardize the health of radiation workers, and is contrary to the longstanding USNRC philosophy of universal adherence to the ALARA ("As Low As Reasonably Achievable") concept.

First, it is certain that two individuals working near a radiation source will receive more total exposure than one working alone. For example, a radiographer working alone might receive 100 mR in a month. For the same amount of work equally alternated between a two person team (one radiographer working and the other in the vicinity keeping the area under surveillance), each might receive 67 mR in the month. Hence, the total universal exposure is increased by 34%.

A second violation of the ALARA concept is that if two-person teams are required for all radiography, a need will exist for more radiation workers. A new group of people is thus unnecessarily exposed to radiation who otherwise would have been employed elsewhere. The mere benefit of a job in radiography is not justification enough to warrant needless exposure.

A third violation of ALARA is that with two individuals performing radiography, it is likely that some jobs will proceed more quickly, with the radiation source exposed for a greater percentage of the time. Though the total exposure from any given amount of inspection work will remain the same, the radiographers will move

more quickly from one job to the next. This results in more radiographic exposure time during their career, and therefore more total individual exposure.

In view of the above problems of ALARA concept violation, it is necessary to examine the proposed "needs" described in the petition for rulemaking:

"Needs" 1 and 2: The difficulty of constantly surveilling congested areas or aboveground areas (when working in a trench). Site constraints should be addressed between individual(s) requesting work and individual(s) providing services prior to work commencement. USNRC enforcement should continue to ensure that failure to keep areas under surveillance by one, two, or any size crew is appropriately addressed. Even now, a radiographer has the obligation to halt work any time a safe work area cannot be assured. Therefore, "needs" 1 and 2 do not lead to increased safety, but only mandate a method of compliance.

"Need" 3: The difficulty of handling radiographic equipment under certain circumstances. This is another situation which should be addressed on a case by case basis. Decreased difficulty might mean "quicker completion", but does not always mean "increased safety". In fact, when responsibility for radiographic exposure equipment is shared between two individuals, an added safety problem potentially exists. A review of overexposures from the last several years shows several which seemed to occur precisely because neither of two individuals working as a team took responsibility for the safety of radiographic equipment.

"Need" 4: The case of an accident involving radioactive material after everyone but the radiographer has left the area. If everyone has left the area but the radiographer, then no significant radiation danger generally exists. As soon as anyone (radiation worker or not) approaches the area, that person may be given instructions on how to notify the proper individuals. The necessity of remaining at an accident site is a unique requirement of a radiographer's work, but rarely constitutes a radiation safety hazard.

"Need" 5: The case of physical injury to a radiographer. Any individual sustaining injury at a remote job site could be placed in a life threatening situation. A special concern is present because of the radiographic source and the potential public exposure, however, making this "need" somewhat more valid than the others. Still, it must be asked whether the extraordinarily rare possibility of injury to a radiographer which incapacitates the individual, keeps him/her from returning the source to a secure position, and keeps him/her from communicating with others in the area is worth the many disadvantages mentioned in the beginning of this letter. The answer is considered a definite "no", but at the same time a solution is proposed. Further information should be added to the already required signs stating the following (or similar):

"IF THE OPERATOR OF THIS EQUIPMENT IS INJURED:

1. FOLLOW ANY INSTRUCTIONS HE/SHE MAY GIVE
2. REMAIN BEHIND THE SIGNS/BARRICADES.
3. CALL (*Licensee's 24 hour emergency number*) COLLECT.
INFORM THEM THAT THERE HAS BEEN A RADIOGRAPHY ACCIDENT.
4. CALL THE USNRC COLLECT AT (*Appropriate number*)."