

## Omaha Public Power District

1623 HARNEY • OMAHA, NEBRASKA 68102 • TELEPHONE 536-4000 AREA CODE 402

DOCKET NUMBER

PROPOSED RULE

PR-20 (36)  
(45 FR 20493)

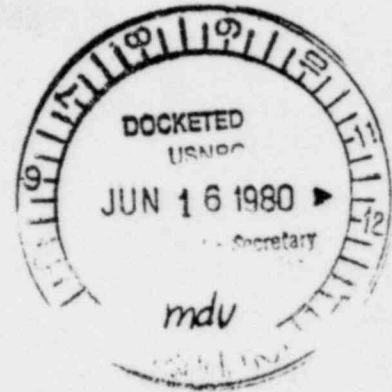
June 13, 1980

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

Attention: Docketing and Service Branch

Reference: Docket No. 50-235

Gentlemen:



On March 28, 1980, the Commission published, in the Federal Register, an advanced notice of rulemaking on certification of personnel dosimetry processors. The Omaha Public Power District offers the following comments on that proposed rule.

The results of the testing program conducted by the University of Michigan demonstrate the operational difficulties involved in passing a personnel dosimetry performance test. As pointed out by the NRC, the inconsistencies are related to the irradiation techniques and calibration methods as well as to inadequate processor quality control and in some cases ineptitude. The problems related to irradiation techniques and calibration methods can be resolved by a processor working in close cooperation with a testing laboratory. The availability of such testing laboratories with accurately calibrated sources has been limited. Techniques and methods generally vary from one laboratory to another. Processor quality control is an area that the individual processor can improve with minimum assistance from an outside laboratory.

A genuine point of concern is that passing of a performance standard does not ensure good personnel dosimetry. This is the case because a different set of calibration factors from those used when testing for the performance standard may be used when determining operational personnel doses. Also, the radiation source spectra used in the testing program, especially for neutrons, may differ significantly from the radiation spectrum to which personnel are subjected at different facilities. This situation must be recognized by both the regulatory agency and the dosimetry processor.

The NRC currently has access to the personnel dosimetry records and methods used by its licensee and, therefore, is in an excellent position to evaluate the performance of the licensee relative to good personnel radiation dosimetry. Compulsory participation in a performance standard

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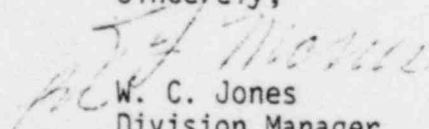
can be significantly beneficial without certification. Certification of a processor's ability to meet the requirements of the performance standard may not significantly improve the quality of operational personnel dosimetry. The NRC, if not satisfied with the personnel dosimetry monitoring performance of a licensee, can require the licensee to provide alternate methods of personnel dosimetry monitoring. This can be done irrespective of whether or not the processor is certified. In summary, certification of the ability to read standard radioactive sources does not certify that a processor has the ability to read personnel dosimetry where the radiation source spectra vary and are considerably different from the source spectra used in the performance standard.

Establishment of a personnel dosimetry performance standard is of high priority. Of equally high priority is the establishment of a workable standard. Experience with the testing program at the University of Michigan demonstrates the difficulty, even with good processors, in meeting the criteria of the standard. The low passing rate of the ANSI standard N13.11, along with the major changes to the standard, indicate that an additional test of the revised standard should be undertaken. Such a test would be beneficial to both the final standard and the processors.

The task of the testing laboratory could best be fulfilled by a private institution under contract. Such a laboratory would have the independence necessary for administering a testing program. The contract would be periodically reviewed, but not terminated and awarded to another institution unless the existing facility was not performing satisfactorily. The technical aspects of the operation should be overseen by the National Bureau of Standards. If certification of the processor is required, a review board should be established to hear cases and make recommendations to a final certification authority.

In conclusion, the establishment of a personnel dosimetry performance standard is a desirable objective. However, since the NRC already has authority over its licensees, requiring the NRC licensee to be certified in compliance with the standard is repetitive. Mandatory participation in a performance standard is desirable because it would provide public information on the ability of a processor to read dosimeters under controlled conditions. This information would be available to the NRC for its use in determining whether a licensee is providing adequate personnel dosimetry monitoring. The NRC, based on the above performance, supplemented by other information, can judge the method used by the licensee to monitor personnel dose, to be adequate or not, and then based on its current authority, the NRC can then require any necessary corrective action.

Sincerely,

  
W. C. Jones  
Division Manager  
Production Operations

WCJ/KJM/BJH:jmm

cc: LeBoeuf, Lamb, Leiby & MacRae