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

Attention: Docketing and Service Branch

Gentlemen:

This is in response to your request for comments on the Draft Regulatory Guide and Value/Impact Statement (Task OP 032-5) entitled, "Test and Calibration of Radiation Protection Instrumentation". Southern California Edison Company has had extensive experience at our San Onofre Nuclear Generating Station implementing a health physics portable survey instrument test and calibration program based on ANSI N323-1978. Although this standard provides an organized framework for standardizing the calibration of radiation protection instrumentation, it establishes criteria that are impossible and impractical to implement in a power plant calibration program.

Our comments are summarized below.

1. The guide does not address alpha or beta survey instrumentation. This fact should be stated as a disclaimer in the introduction in order to clarify the purpose of the document.

2. Regulatory Position 1 endorses Section 6.2 of ANSI N323-1978. The free-space geometry calibration facility recommended in the standard is not practical for power plant calibration programs. Adequate space for an open-air calibration facility is difficult to allocate. Controlling calibration personnel exposures ALARA would be more difficult than now experienced with manufactured enclosed, large source calibrators.

3. Regulatory Position 3 requires periodic performance tests of survey instruments on each scale pursuant to Sections 4.6, 4.7 and 5.4 of the standard. It is neither practical nor consistent with ALARA to require a source large enough to respond on the upper scales of some survey instruments to be located at an instrument issue station where worker traffic can be appreciable. We believe calibrating an instrument at a designated frequency based upon stability and use, and checking instrument response before each use on a low scale is sufficient to meet the intent of the requirement.

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4. Section 4.2 of ANSI N323-1978 states that instrument calibration efficiency must be within plus or minus 10 percent of the known radiation values at calibration adjustment points. This limit is unrealistic. We believe plus or minus twenty percent provides adequate accuracy for the following reasons:

   a) randomness of needle movement on certain lower scales is greater than the proposed limit,

   b) compression of the logarithm or semi-logarithm markings on the upper scales on certain instruments makes it impossible to obtain the proposed precision limit,

   c) displays from digital readout instruments vary randomly consistently greater than the desired accuracy, and

   d) use of a calibration chart or graph with each instrument is impractical for field use.

5. Nonradiological characteristics of instrument calibration should be addressed.

Southern California Edison does not endorse publication of the proposed guidance without certain modifications as outlined above. We would be happy to discuss with you our recommendations in greater detail. If you have any questions, please contact John Wray, Corporate Health Physicist, at (818) 302-1824.

Yours very truly,

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Manager, Nuclear Licensing

JRW:scm