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emp

August 10, 1982

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

DOCKET NUMBER
PROPOSED RULE PR-Misc. Notice (Reg Guide)

Attention: Docketing and Service Branch

Subject: Second Proposed Revision 4 to Regulatory Guide 8.8 "Information Relevant to Ensuring That Occupational Radiation Exposures At Nuclear Power Stations Will Be As Low As Reasonably Achievable (ALARA)" - Task OP 618-4

Dear Sir:

Commonwealth Edison has reviewed the subject Regulatory Guide and offers the attached comments. We appreciate having been given the opportunity to comment.

Respectfully,

T. R. Tramm
for
L. O. DelGeorge
Director, Nuclear Licensing

Attachment

4664N

DS09
add: Ed Hill
5650 NL

Acknowledged by card. 8/16/82 emp

Commonwealth Edison Company Comments

Second Proposed Revision 4 to Regulatory Guide 8.8 - ALARA

1. The addition of references throughout the proposed revision is a distinct improvement and leads to a better understanding of the regulatory positions.

2. Section B.1 Need For Maintaining Doses ALARA in a Radiation Protection Program

Page 4, the paragraph beginning "Annual collective radiation doses ...."

Comment: There is a general reluctance to reference these "typical" numbers in a Regulatory Guide because of the potential enforcement as a regulation. Furthermore, we feel the inclusion of typical manrem totals must be clarified to distinguish differing personnel exposures associated with 2-loop and 4-loop PWR's and BWR's.

3. Section C.1.2 Organization, Personnel and Responsibilities

Page 10, the paragraph beginning "In view of the need.... The ALARA committee should review in advance any task that is predicted to cause in excess of 10 manrems."

Comment: We agree with the corporate ALARA program and feel the ALARA committee involvement should begin with tasks that are estimated to exceed 30 manrem. The station ALARA Coordinator routinely reviews jobs that are estimated to exceed 5 manrem and would contact all necessary personnel to conduct an ALARA review. Committee involvement at 10 manrem would be administratively impractical.

4. Section 2.3 Process Instrumentation and Controls

Page 20, Paragraph 2 states "...As radiation levels build up, consideration should be given to relocation of readouts or control points."

Comment: In addition to consideration of relocation of instrumentation or control points, permanent shielding should also be mentioned as a means of reducing dose in an area where instrumentation or control points are located.

5. Section 4.1 Counting Room

Page 35, This section discusses the need for a low radiation background counting room. The important element for analyzing low activity samples is that the detector be located in a low background area. This can also be accomplished by shielding the detectors without necessarily requiring extensive shielding of the counting room.

To eliminate the discrepancy we recommend the wording be changed to "A low-radiation background detector counting system is needed..."

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USNRC

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OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

Bechtel Power Corporation
Engineers – Constructors

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August 9, 1982

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

DOCKET NUMBER
PROPOSED RULE PR-Misc. Notice
(Regulatory Guide)

Attention: Docketing and Service Branch

Subject : Second Proposed Rev. 4 to Reg. Guide 8.8, Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations will be ALARA

Gentlemen:

We have reviewed the subject Regulatory Guide revision and offer the following in response to your request for comments.

We note that Section C.1.2 discusses the establishment of annual collective and job specific dose goals. While this may be desirable, we believe it is important that cost-effectiveness guideliness (i.e. dollars per man-rem) be used in setting and achieving any man-rem goals. The primary ALARA objective should be to achieve the highest dose reduction for the least cost within the guidelines. Meeting a man-rem goal should be of secondary importance.

Furthermore, recognizing the uncertainties involved in man-rem estimates, not meeting a goal shouldn't be construed as a failure to meet the ALARA objective. In addition, the Guide should explicitly state that justification of failure to meet man-rem goals is not required.

Additional detailed comments are attached for your consideration.

Sincerely,

A.L. Cahn
Manager of Engineering

DS09
add: Ed Hill
S650 NL

Encl.
ALC:ntl

Acknowledged by card. 8/16/82 emp

BECHTEL COMMENTS ON "SECOND PROPOSED REVISION 4 TO REG. GUIDE 8.8"

- Page 10, Section 1.2

  Qualifications and responsibilities of the proposed "ALARA Committee" should be presented. It should also be explicitly stated that this committee is formed for the plant operational period and is not required in the design period.

  The technical basis for deviating from the 100 man-rem guideline as presented in NUREG-0761 should be provided for the stated 10 man-rem value.

- Page 11, Section 1.2 and page 13, Section 1.2, Item 7

  Setting man-rem goals is not necessarily consistent with the cost-benefit aspects of ALARA. Unless cost-effectiveness guidelines (i.e. dollars per man-rem) are developed and used as a decision making tool in attempting to set and meet a man-rem goal, unjustified expenditures may be required to achieve a goal. We believe that ALARA objectives should be to achieve the highest dose reduction for the least cost within the cost-benefit guidelines. Meeting a man-rem goal would be a secondary objective.

  Because of the uncertainties in man-rem estimates, not meeting a goal would not imply that the ALARA objective had not been met. It should, therefore, be explicitly stated that failure to meet man-rem goals would not require justification.

  If dose goals are used at an operating plant, they should be based on a practical dose reduction approach using cost-benefit guidelines rather than applying arbitrary reduction factors. Goals would be extrapolated from knowledge of the expected man-rem for specific tasks both recurring and non-recurring.

  For recurring operations, the approach would be to look at exposures experienced during the most dose intensive parts of the operation and evaluate the feasibility and cost-effectiveness of alternatives to reduce those exposures. Only then could a goal be established for comparison with actual exposures during a subsequent operation.

  Any attempts to establish goals for non-recurring tasks would have to rely on man-rem estimates. The estimates would be based on the best available information on the probable manhours in each area and measured or estimated dose rates. Due to the large uncertainties, goals derived from these man-rem estimates would be very 'soft' and could only be used in evaluation of relative merit of various alternative dose reduction techniques. Comparison with actual exposures may only confirm the softness of the estimate.

- Page 16, Section 2, Paragraph 2

  The bases for the source term recommendation for fission products and activation products are inconsistent. Fission products are based on "design basis" failed fuel rates while activation products are based on "expected" levels from ANSI N237-1976. This discrepancy should be resolved.