

UNITED STATES NUCLEAR REGULATORY COMMISSION ADVISORY COMMITTEE ON REACTOR SAFEGUARDS WASHINGTON, D. C. 20555

December 19, 1983

Honorable Nunzio J. Palladino Chairman U. S. Nuclear Regulatory Commission Washington, DC 20555

Dear Dr. Palladino:

SUBJECT: ACRS REPORT ON THE PROPOSED ADDITION OF A HUMAN FACTORS CRITERION

TO 10 CFR 50, APPENDIX A

During its 284th meeting, December 15-16, 1983, the Advisory Committee on Reactor Safeguards was briefed by the NRC Staff on a proposed regulatory change to Appendix A of 10 CFR Part 50 which would add a human factors criterion. This criterion will require that human factors design principles, practices, and guidelines be used in the design and construction of new nuclear power plants, structures, systems, or components. The criterion was also discussed during a meeting of the ACRS Subcommittee on Human Factors on November 30, 1983. The Committee had the benefit of the document referenced.

The criterion, as proposed, would require that human "anthropometric, perceptual, cognitive and motor response capabilities and limitations" be accommodated in the design of nuclear power plants. We suggest that it would be useful to add the term, "physiological" to this list to assure consideration of factors, such as heat stress, that could affect human performance.

We recommend that the NRC Staff's proposed criterion be issued for public comment. The Committee would like the opportunity to review this proposed regulatory change after public comments are received and evaluated.

Sincerely,

J. J. Ray

Chairman

Reference:

Memorandum dated December 1, 1983, with enclosures, from K. Goller, NRC, to D. Ward, ACRS, Subject: ACRS Review of Proposed Rulemaking Change to 10 CFR 50, Appendix A, Human Factors Criterion Addition to General Design Criteria