



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAR 28 1988

Reference

(1101)

PDR: P. C. R.
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MEMORANDUM FOR: Victor Stello, Jr., Executive Director
for Operations

FROM: Eric S. Beckjord, Director
Office of Nuclear Regulatory Research

SUBJECT: CLOSURE OF GENERIC ISSUE I.D.4
"CONTROL ROOM DESIGN STANDARD"

Generic Issue I.D.4, "Control Room Design Standard," is a Three Mile Island (TMI) Task Action Plan (TAP) item. NUREG-0660 stated that the issue would be resolved by NRC issuance of a

"...regulatory guide based on an evaluation of industry standards [IEEE 566 and 567] that includes consideration of the applicability of these standards to plants under construction...."

Prompt revision of IEEE 566 and 567 was to be urged, and compliance with the regulatory guide was to be required as necessary. Publication of the regulatory guide was originally scheduled for May 1982. The Office of Nuclear Reactor Regulation (NRR) was to ensure compliance or commitment to comply by May 1983.

Responsibility for Generic Issue I.D.4 was transferred from NRR to the Office of Nuclear Regulatory Research (RES) by an April 10, 1987, memorandum from W. Russell to T. Speis. RES review of the status of Generic Issue I.D.4 indicates the following:

1. The Institute of Electrical and Electronics Engineers, Inc. (IEEE) published IEEE Standard (Std) 566, "IEEE Recommended Practice for the Design of Display and Control Facilities for Central Control Rooms of Nuclear Power Generating Stations," in 1977. However, IEEE Std 566 was subsequently withdrawn.
2. IEEE P1023, "IEEE Guide for the Application of Human Factors Engineering to Systems, Equipment, and Facilities of Nuclear Power Generating Stations," will supplant IEEE Std 566. P1023 is a broader document than IEEE Std 566. It addresses the process of human factors engineering and the issues to be addressed by that process. As described, the process is applicable not only to the control room but to the entire plant. P1023 does not provide the detailed design criteria which are commonly found in human factors engineering standards. P1023 is nearing final IEEE approval.
3. ANSI/IEEE Std 567, "IEEE Trial-Use Standard Criteria for the Design of the Control Room Complex for a Nuclear Power Generating Station" is under revision. Final approval is not expected until late 1989 at the earliest.

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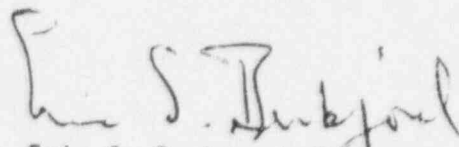
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4. There has been no NRC action aimed directly at resolving Generic Issue I.D.4 since publication of NUREG-0660 (May 1980). However, the NRC has reviewed and commented on drafts of IEEE P1023 and is expected to review and comment on draft revisions of IEEE Std 567.
5. Although no action was taken on Generic Issue I.D.4, all commercial nuclear power plants in the United States, whether operational or under construction, are being subjected to a Detailed Control Room Design Review (DCRDR) in response to TMI TAP I.D.1. NUREG-0700 "Guidelines for Control Room Design Reviews" and acceptable substitutes (e.g., the Boiling Water Reactor Owner's Group "Control Room Survey Program" and "Checklist Supplement") are being used as control room design standards.
6. All future applications for light water reactors shall include, per 10 CFR 50.34(g), an evaluation of the proposed facility against the Standard Review Plan (the SRP -- NUREG-0800). SRP section 18.1 addresses control room design and references NUREG-0700 as appropriate guidance for control room design.
7. NRR requested (November 9, 1987, memorandum from T. Murley to E. Beckjord) that RES determine the need for control room design standards for advanced control rooms.

Items 5 and 6 above indicate that staff action has negated the need for evaluation of industry control room design standards and for development of a Regulatory Guide endorsing those standards. NUREG-0700 and acceptable substitutes are the de facto control room design standards for evaluating commercial nuclear power plants in the United States. As the result of the staff action Generic Issue I.D.4 has been resolved and is closed. Coordination with NRR supports this determination. Information in the Generic Issue Management Control System will be revised accordingly. Design standards for advanced control rooms will be addressed as a research issue under the newly established Human Factors Research Program.



Eric S. Beckjord, Director
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cc: See next page

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