MEMORANDUM FOR: Warren Minners, Deputy Director

Division of Reactor and Plant Systems

FROM:

Franklin D. Coffman, Acting Chief Reliability and Human Factors Branch Division of Reactor and Plant Systems

SUBJECT:

PLANS FOR RESOLUTION OF HUMAN FACTORS GENERIC

R-2000.03 RG 1.33 Ret to orig

ISSUES I.B.1.1 AND I.D.4

During the DRPS program review on September 2, 1987, you requested that plans for resolving human factors generic issues I.B.1.1 and I.D.4 be developed by the end of September 1987. Plans and schedules for resolution of these issues are given below. Updates to the Generic Issue Management Control System (GIMCS) will reflect these schedules.

I.B.1.1 -- Organization and Management Long Term Improvements. This Three Mile Island Task Action Plan (TMI TAP) item encompasses seven sub-items. Four of those sub-items were resolved by Commission deference to NUMARC initiatives. One was resolved by reference to normal NRC activities. Resolution of the remaining two sub-items depends upon publication of revised Regulatory Guides 1.33, "Quality Assurance Program Requirements (Operation)," and 1.8, "Qualification and Training of Personnel for Nuclear Power Plants." Reg. Guide 1.8, Revision 2 was published in April 1987. That leaves only publication of Reg. Guide 1.33, Revision 3 to resolve the issue completely. The schedule for Reg. Guide 1.33, Revision 3 publication is January 1990 because it endorses ANSI/ANS 3.2 which is also being revised. However, tracking of the revision to Reg. Guide 1.33 was formally transferred from Generic Issue I.B.1.1 to Generic Issue 75, "Generic Implications of ATWS Events at Salem - OA," by a July 26, 1984 memorandum from R. DeYoung to W. Dircks. Thus, as you recommended, this generic issue should be considered resolved. That position has been discussed with the G. Cwalina (acting chief, NRF/DLPC/PEB) and with Ron Emrit (GIMCS). No concerns were identified. A memorandum indicating that Generic Issue I.B.1.1 is resolved will be prepared by November 30, 1987 for transmittal from E. Beckjord to V. Stello.

I.D.4 -- Control Room Design Standard. The resolution proposed by the TMI TAP for this item was a regulatory guide endorsing two IEEE standards (566, "IEEE Recommended Practice for the Design of Display and Control Facilities for Central Control Rooms of Nuclear Power Generating Stations," and 567, "IEEE Trial-Use Standard Criteria for the Control Room Complex for a Nuclear Power Generating Station"). There appears to have been no further NRC action on this issue since publication of the TMI TAP. One of

8710280237 871006 PDR REGGD 01.030 C PDR the IEEE standards (566) specifically referenced by the TMI TAP has been published and withdrawn. That standard has been subsumed by a new document (P1023, "IEEE Guide for the Application of Human Factors Engineering to Systems, Equipment, and Facilities of Nuclear Power Generating Stations") which is nearing final approval by the IEEE standards board. Revision of the second IEEE standard (567) has just been approved by the IEEE Nuclear Power Engineering Committee. The revision process is expected to take a minimum of thirty months through final approval of the revised document by the standards board.

Resolution of this issue should also consider endorsement of new IEEE document (P845, "Guide to Evaluation of Man-Machine Performance in Nuclear Power Generating tation Control Rooms and Other Peripheries") which was not cited by the TMI TAP. Like P1023, P845 is nearing final approval by the IEEE standards board.

There was concern about whether work on this generic issue is still warranted since all existing plants have been subjected to Detailed Control Room Design Reviews. Discussion with the S. Weiss (section leader, man-machine interface section, NRR/DLPQ/HFAB) indicated that the need for a regulatory guide addressing control room design for future plants does exist.

Based on the schedule for revision of IEEE 567 and the medium priority rating of this issue, the earliest possible publication of a regulatory guide endorsing IEEE standards associated with control room design is expected to be September 1991.

One other question about human factors generic issues was raised during the program reviews. That question was, "why does Generic Issue 122.2 address initiation of feed and bleed when it should have been covered by TMI TAP items I.C.1 or I.C.9?". The answer is that Generic Issue 122.2 arose from the Davis-Besse Feedwater Transient of June 9, 1985. TMI TAP items I.C.1 and I.C.9 were already resolved at that time. Resolution of Generic Issue 122.2 is the responsibility of NRR/DEST/RSB.

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