

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

November 9, 1982

Mr. William J. Dircks Executive Director for Operations U. S. Nuclear Regulatory Commission Washington, DC 20555

Dear Mr. Dircks:

SUBJECT: ACRS COMMENTS ON THE NRC INTEGRATED HUMAN FACTORS PROGRAM PLAN

During its 271st meeting, November 4-5, 1982, the ACRS reviewed the October 15, 1982 draft version of the NRC Integrated Human Factors Program Plan. The Committee considered the recommendations of its Subcommittee on Human Factors and also had the benefit of presentations by the NRC Staff. Earlier versions of the Plan had been reviewed by the Subcommittee on September 7, 1982 and October 28, 1982. Subcommittee comments on an earlier draft were forwarded to H. Denton in a memorandum from R. Fraley dated September 14, 1982.

We believe the redrafted Plan is very much improved over earlier versions and has been responsive to the Subcommittee concerns expressed in the memorandum of September 14, 1982. With continued management attention and support, the Plan should be an effective tool for conduct of the NRC nearterm and longer-range programs addressing the impact of human factors on reactor safety.

We believe that the Program would benefit from an initial appraisal of the current status of matters covered in the Human Factors Program. Such an appraisal should identify the range of practices currently in use, their strengths and weaknesses, and the rationale for further effort to alter or improve some or all of them.

We applaud the proposal for a formal review group to oversee the program and the plans to involve industry in the scheduled, thrice-annual review meetings. We believe consideration should be given to including one or more industry representatives as formal members of the review group because of the need for effective coordination of complementary and supplementary industry and agency programs.

We believe it is important that a special effort be made to place research in the human factors area with academic and private/industrial research organizations rather than primarily with National Laboratories. The science Mr. William J. Dircks

and technology in this area have a fairly long history but have only recently been explicitly applied to reactor safety issues to the degree now considered appropriate. For this reason, we believe that the body of experience and expertise outside of the National Laboratories is an extremely important resource that should be used.

The Human Factors Program includes the development of methods for evaluation of the various training programs now in existence or to be developed. It does not contain explicit reference to the existence or the development of methods for measuring the performance of those individuals for which the various training programs are designed. We recommend that methods for performance evaluation be developed both to determine the existing level of competence and to determine the efficacy of future training programs.

As the NRC Staff moves forward with the establishment of staffing requirements for nuclear power plants, we believe it is important that they keep in mind the manpower and associated education and training programs that these requirements will necessitate. We urge that the Program Plan directly address this issue.

We understand that the Plan will be periodically revised and updated. We wish to be kept informed of these changes and major activities related to the Plan.

Additional comments by ACRS Member Jeremiah J. Ray are presented below.

Sincerely,

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Additional comments by ACRS Member Jeremiah J. Ray

I am concerned that coordination of the overall program among the divisions of the NRC and between the NRC and industry organizations will depend on the initiative of the individual branches in the agency. I believe that such responsibility for a project of this magnitude should be centralized and that consideration should be given to appointment of a project manager for the program, similar to the practice followed for major Unresolved Safety Issues.