

June 17, 1985

MEMORANDUM FOR: Victor Stello, Deputy Executive Director  
for Regional Operations and Generic Requirements

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

John G. Davis, Director  
Office of Nuclear Material Safety and Safeguards

FROM: Frank J. Miraglia, Chairman  
Vital Area Committee

SUBJECT: VITAL EQUIPMENT/AREA GUIDELINES STUDY REVISED ACTION PLAN

- References: 1. Memorandum from William J. Dircks, "Vital Equipment/Area Guidelines Study," dated May 1, 1985.  
2. Memorandum from Frank J. Miraglia, "Vital Equipment/Area Guidelines Study Action Plan," dated May 21, 1985.

My memo to you dated May 21, 1985 (Reference 2) outlined a proposed action plan for the subject study. Based upon the discussions at our meeting with the Management Policy Review Group on June 4 and further consideration by the Vital Area Committee, we have revised the proposed action plan. It is enclosed for your review and consideration.

We have arranged to meet with you on Tuesday, June 25, 1985 at 9:00 a.m. in Room P-422 to discuss the revised plan with you and to obtain your comments and approval.

Original signed by  
Frank J. Miraglia, Chairman  
Vital Area Committee

Enclosure:  
As stated

cc w/enclosure:

T. Murley, Administrator, Region I  
J. Nelson Grace, Administrator, Region II  
R. Burnett, Director, Division of  
Safeguards, NMSS  
J. Partlow, Director, Division of  
Inspection Programs, IE  
F. Gillespie, Director, Division of  
Risk Analysis and Operations, RES

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

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A handwritten signature in cursive script that reads "Frank J. Miraglia".

Frank J. Miraglia, Chairman  
Vital Area Committee

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As stated

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VITAL EQUIPMENT/AREA GUIDELINES STUDY  
ACTION PLAN

Objectives of Study

Develop a comprehensive and consistent set of recommended assumptions, performance criteria and guidance, in a report to the EDO, for determining vital equipment/areas in nuclear power plants. The assumptions and guidance should:

1. Consider conditions of normal operation, including anticipated operational occurrences, and those transients and accidents of the types presently considered in the design basis analysis of nuclear power plants;
2. Consider outage activities to the extent that loss of operational functions and capabilities during outages impacts vital equipment;
3. Be readily applicable to identification of required vital equipment and areas on a case-by-case basis; and
4. Have review and concurrence of all cognizant offices.

Scope of Study

The Vital Area Committee (VAC) will:

1. Review all regulations, guidance, definitions, assumptions and criteria currently in effect related to determination of vital equipment and areas;
2. Determine the present status of the application of the items in (1) above to various vintages of plants to establish what staff practice has been and is at present with respect to approving designated vital equipment and areas;
3. Identify any deficiencies, ambiguities, inconsistencies and other problems in the present regulatory approach;
4. Review and evaluate recent and current staff proposals, proposed rules, etc., as they relate to and impact vital equipment and areas. For example, this would include the following:
  - a. Protection of event mitigating capabilities and their support facilities; e.g., water sources, pumps, switchgear, cable runs;
  - b. Constraints on vital island concept and compartmentalization requirements;

- c. Acceptable final state (hot vs. cold shutdown), required duration of that state, reliance on outside assistance, and consideration of normal equipment repair capabilities;
- d. Provisions for compensating for vital equipment which is out of service for maintenance;
- e. Credit for plant-specific features and capabilities such as feed-and-bleed;
- f. Information, data and recommendations from recent staff and contractor studies as well as operational experience relevant to vital equipment and areas; and
- g. Methods used to protect critical equipment for other purposes, such as fire protection.

#### Study Methodology

The following approach is planned for Vital Area Committee Information and data acquisition and assessment:

1. Independent VAC review and evaluation of all relevant documentation; and
2. A series of briefings to the VAC by staff and NRC contractors, as outlined in Attachment 1 (note that these briefings have been completed).

#### Schedule

The attached figure (Attachment 2) shows the milestones and target dates for the first phase of the study which will produce preliminary recommendations to the Management Policy Review Group (MPRG). The balance of the study will involve obtaining necessary concurrences of the recommendations and preparing a report.

BRIEFING SCHEDULE FOR VITAL AREA COMMITTEE

Session 1 - May 21, 1985, 10:00 a.m. Room 2242 Air Rights

- ^ Current practices for pre-licensing vital area reviews - NMSS
- ^ LANL vital area analyses - LANL
- ^ Vital area criteria for RFR reviews - NMSS
- ^ Summary of Insider Rule - NMSS

Session 2 - May 30, 1985, 9:00 a.m. Room P-422 Phillips

- ^ RES/LANL vital area study - LANL
- ^ Evaluation of current definitions and assumptions on vital areas - MPP/DSI
- ^ Appendix R, Fire Protection - NRR/DSI
- ^ Generic Issue A-29, "Nuclear Power Plant Design for the Reduction of Vulnerability to Sabotage" - NRR/DSI
- ^ Vital area inspection program - IE
- ^ Vital area inspection program implementation and critique of current assumptions and suggested changes - Regions I & II

Session 3 - June 6, 1985, 9:00 a.m. Room P-422 Phillips

- ^ USI A-45, "Shutdown Decay Heat Removal Requirements" - NRR/DST
- ^ Review of "Precursor Studies of Risk Analysis of Several Known Safeguards Events" - RES
- ^ Review of "Nuclear Power Plant Damage Control Measures" - RES

Schedule For Initial Phase of Study