

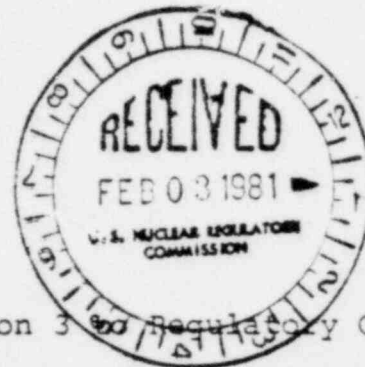
# PAC

PROJECT ASSISTANCE CORPORATION

URGENT MATTER  
RECOMMENDED RULE *PR misc notice Reg Guide*

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Secretary of the Commission  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing and Service Branch

Subject: Comment on Second Proposed Revision 3900 Regulatory Guide  
1.33, Division 1, Task RS 902-4

One facet of the subject proposal is establishment of an Independent Safety Engineering Group (ISEG) to better overview reactor plant operational phase activities. Experience has certainly demonstrated that such overviewing must be upgraded. However, ISEG does not appear to be the optimum possible method because it would be an expensive proliferation/overlapping of expertise which is supposed to already exist in the Quality Assurance effort and because it does not directly address the generic faults of insufficient capability/authority for existing monitoring activities and insufficient real involvement/support from highest management.

The attachment to this letter briefly outlines and justifies an alternative proposal for strengthening administrative controls and quality assurance to best ensure nuclear power plant operational safety. Such a proposal if implemented, should make existing monitoring activities able to perform with the necessary effectiveness. It would also escalate the final direct overview responsibility for plant operation to the highest level of owner organization management where it inherently belongs but has generally been unacknowledged in the past. The above management/review philosophy has evolved from observations during over twenty-five years of monitoring nuclear propulsion plant design, construction, testing, operation and maintenance.

Respectfully,

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AEF/kb

Att: 4-13

*1/26/81*

*I. H. ...*

Suggested Organization for Nuclear Power Plant  
Program of Administrative Controls and Quality  
Assurance (QA) to Best Ensure Operational  
Phase Activities are Carried out without Undue  
Risk to the Health and Safety of the Public

1. Introduction - The organization described in succeeding paragraphs would result in more effective continuous independent monitoring of plant operations without unnecessary proliferation of review groups or dilution of operating efforts. This organization would also escalate knowledgeability of and accountability for safety matters so that highest management is more involved in one of its inherent, but frequently unacknowledged, responsibilities.
2. Nuclear Regulatory Commission (NRC) Proposal - The NRC is currently proposing (in the 2nd Proposed Revision 3 to Regulatory Guide 1.33) establishment of an Independent Safety Engineering Group (ISEG) to have review responsibilities for such operational areas as adequacy of procedures, records, reports to NRC, responses to audit reports, basic operation, etc., most of which are already assigned as responsibilities for other independent review activities. However, the NRC proposal indicates ISEG is not intended to replace existing review groups. Experience has certainly demonstrated that effectiveness of monitoring of nuclear power plant operational activities should be upgraded; but ISEG appears to be an attempt to resolve the problem by costly low level proliferation instead of by correcting the basic causes (insufficient capability/authority for existing monitoring activities and insufficient involvement/support from highest management).
3. Commonality of Safety and QA - Safety and QA have traditionally been inherently closely related as manifested by their commonality treatment in regulatory documents such as 10CFR50, Appendix B and Regulatory Guide 1.33. Effective execution of safety and QA efforts require the same independence from operation and cost pressures and adequate authority and access to higher level management. In fact, plant safety depends primarily on the quality of plant operation.
4. Potential Overlap of ISEG and Existing QA Organization Responsibilities - Examples of indicated areas of ISEG/QA overlap for the program of administrative controls and QA which Owner organizations are obligated to establish (ANSI N18.7-1976/ANS 3.2, Section 3) are:
  - a) Ensurance of proper preparation, review and approval of procedures; including qualification of reviewing personnel.
  - b) Review and concurrence with selection of personnel to perform surveillance testing and inspections.

4. (Continued)

- c) Ensurance that audits are conducted and satisfactory corrective actions implemented.
- d) Evaluation of QA program effectiveness.

5. ISEG Disadvantages - ISEG, a second separate group with the same general responsibilities as the existing QA organization, is not the best way of obtaining improved monitoring of and safer plant operation, because it is not cost effective and does not correct the basic problems (see Paragraph (2) above). It would require the Owner organization to hire at least five additional highly paid engineers (total cost of at least one quarter million per year, per plant site), when much of the desired expertise probably is supposed to already exist in the QA group. It would also require another middle level leader with the hard-to-find independent monitoring expertise/philosophy and would generate more interfaces to be bridged among the same type efforts.

6. Alternative Arrangement - Consideration of the preceding paragraphs indicates that it would be administratively logical and most economical to absorb any required new ISEG type functions into the existing QA organization. However, some other changes should also be made to optimize effectiveness of the independent review effort for plant operation and safety.

a) Strengthening QA Effort - The best way to improve effectiveness of QA plant operation monitoring would be a mandated requirement for the QA effort leader/manager to report directly to the President of the Owner organization with the same administrative title/authority/position as all others reporting to the President. In addition, the competency of the QA leader should be ensured by requiring that he or she be qualified/certified professionally as a Certified Quality or Reliability Engineer by the American Society of Quality Control (the professional qualification/certification of this position should be at least as rigorously controlled and guaranteed as other parallel or lower level specialist positions in the Owner organization).

b) High Level Oversight of QA Program Effectiveness and Other Middle Level Review Activities - The detailed technical contribution perceived for the ISEG by the 2nd Proposed Revision 3 to Regulatory Guide 1.33 would already exist in or could be obtained by relatively minor additions to an effective QA group (see Paragraph a) above). The desired increased oversight of safety related operations could be better obtained by assigning the responsibility to a top level Nuclear Safety Audit Group made up of members from the Owner organization Board of Directors (B of D) (preferably outside Directors)



ATTACHMENT TO PAC LETTER

6. (Continued)

b) (Continued)

rather than by proliferation of lower level groups which are vulnerable to being intimidated or ignored by higher management. Such an arrangement would provide the opportunity for the B of D to realistically exercise its inherent obligations with respect to safe plant operation and protection of stockholder interests (defaults high-lighted by Three Mile Island).

7. Additional Benefits of Alternative Arrangement - The following additional general benefits would accrue:

- a) More assurance of visibility and awareness by top management of nuclear power plant operation.
- b) Responsibility for obtaining expeditious correction of significant deficiencies, identified by both internal audits and NRC inspections, would be automatically shared by the highest level of the Owner organization.
- c) Involvement of B of D would stimulate increased direct attention to safe plant operation by upper and middle management (both plant and corporate) and more effective correction of basic causes of problems (instead of only correction of isolated problems themselves).
- d) Justification for blaming the NRC for unnecessarily adding to cost of operating nuclear power plants would be decreased.

8. Self Review by Operating Activity People - QA is not the sole concern of external oversight efforts. Any actions to improve the efficiency of such efforts should not be an excuse for decreasing self evaluation by the operating activity.