

March 10, 1986

MEMORANDUM FOR: Vincent S. Noonan, Director  
Project Directorate No. 5  
Division of PWR Licensing-A  
Office of Nuclear Reactor Regulation

FROM: David B. Matthews, Chief  
Emergency Preparedness Branch  
Division of Emergency Preparedness  
and Engineering Response  
Office of Inspection and Enforcement

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON SEABROOK  
STATION EMERGENCY ACTION LEVELS

Enclosed is a request for additional information/clarification developed as a result of our review of the emergency action levels (EALs) contained in Section 5.0 (FSAR Amendment 56) "Emergency Classification System" of the Seabrook Station Radiological Emergency Plan.

An emergency classification and action level scheme compatible with NUREG-0654 has been established by the applicant. However, revision to specific EALs in Section 5.0 is required before we can conclude that the EAL scheme conforms to the guidance criteria of NUREG-0654. A preliminary discussion was held with the applicant in an impromptu meeting on February 27, 1986 in conjunction with the emergency plan exercise and appraisal effort. Our comments are included in the attached draft letter.

Please transmit the enclosed request to the applicant and provide this Branch with a copy of the final transmittal.

Original Signed By:  
David B. Matthews

David B. Matthews, Chief  
Emergency Preparedness Branch  
Division of Emergency Preparedness  
and Engineering Response  
Office of Inspection and Enforcement

Enclosure:  
Request for Additional Information  
on Seabrook EALs

CONTACT: Donald J. Perrotti, IE  
492-4865

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D R A F T

Gentlemen:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - EMERGENCY ACTION LEVELS

The staff has reviewed the emergency classification scheme contained in Section 5.0 (FSAR Amendment 56) of the Seabrook Station Radiological Emergency Plan. As a result of our review we find that additional information/clarification (See Enclosure) is required on the Emergency Action Levels (EALs) listed in Section 5.0 of the Plan before we can conclude that the EALs conform to the guidelines expressed in Appendix 1 to NUREG-0654.

Please provide your response to the enclosed staff comments within seven days.

If you desire any discussion or clarification on the information requested, please contact NRC Project Manager, Victor Nerses, 301/492-8535.

Sincerely,

Enclosure:  
Comments on EALs

ENCLOSURE: SEABROOK EMERGENCY PLAN EAL EVALUATION

A. GENERAL FINDINGS:

1. Figure 5.3, Critical Safety Function (CSF) for the Heat Sink, is improperly labeled Number 4. It should be Number H.
2. The plan skips misc. emergency condition 8c, a typo.
3. The words "other than fire" should be deleted from chart EAL 17.

B. PLAN EALS VS NUREG-0654 App. 1 GUIDANCE.

Note - In the remainder of this enclosure, paragraph numbers conform to the initiating conditions of Appendix 1 of NUREG-0654.

NOTIFICATION OF UNUSUAL EVENT (NOUE)

1, 3c, 4, 5, 6, 9, and 17 are not specifically identified in the Seabrook EALs. Confirm that these initiating conditions are covered and that a NOUE would be declared under such conditions.

3b. Classified as an Alert (not NOUE) at Seabrook but only if based upon letdown monitor readings. The case of equivalent values from an RCS sample (as distinct from the letdown monitor) is not covered.

11 & 12. Not covered by the Seabrook EALs.

8. Not covered. It appears that the intent was to cover this requirement in Seabrook EAL item 20. However, no classification can result from item 20.

13, 14 & 15. Covered generically as Seabrook item 18a. However, the detailed definition stated in the NUREG initiating conditions is missing. Seabrook simply discusses "hazards", undefined.

ALERT

1b. The Seabrook EAL is solely contingent on letdown monitor and neglects the possibility of a 300 uCi/cc input from an PCS sample, as is provided for in the more general definition of the NUREG.

1c, 4, 6, 19. Not covered in Seabrook EALs

5. Incomplete. Provided that the numbers work out, it possible that a leak of 50 GPM outside containment would invoke Seabrook EAL 12b. However, the case of the 50 GPM leak inside containment is not addressed.

10. Incomplete. Although the Seabrook EALs address some facets of this item (e.g., 6c, 16c, etc.), it does not appear that "Complete loss of any function needed for plant cold shutdown" has been covered. Those functions must first be defined.

12. Incomplete. The Seabrook EAL (13) states "fuel accident with release of radioactivity". Recommend consider adding "to containment or fuel handling building".

15. Incomplete. Typically, there are many tech spec radiological limits with one set called "instantaneous". Assuming that is the case, since no particular tech specs are referenced in Seabrook EAL 12b, omission of "instantaneous" is critical.

16, 17 & 18. Incomplete. Lacking a definition of the word hazard in Seabrook 18b, it does not appear that the specific circumstances of the NUREG (II. D. 1) are covered by this item. See comment under NOUE 13, 14, 15.

#### SITE AREA EMERGENCY (SAE)

1. This initiating condition correlates to Seabrook EAL item 15. However, there is no SAE in Seabrook 15. The terminology "emergency coolant recirculation" is ambiguous.

- 5, 13a, 13b. Not covered in Seabrook EALs.
  
8. Clarification is needed. Many of the applicable situations are covered. To ensure that "Complete loss of any function..." was addressed, definition of functions needed for hot shutdown is required.
  
10. Not covered by Seabrook EALs. Without input from radiation levels, the only classification made for a fuel handling accident by the Seabrook plan is an Alert.
  
11. Clarification of Seabrook plan EAL (16c) is required regarding the SAE related to fire. The NUREG merely requires that the fire compromise the function of safety systems. Seabrook's alert level (16b) fire is controlled, contained, and potentially affecting; the SAE fire is uncontrolled, uncontained, actually affecting. There is no classification for a controlled, contained fire affecting safety related equipment consistent with NUREG-0654. The entire set of fire classifications in the plan should be reviewed.
  
14. Clarification of Seabrook EAL 18c is required with regard to "hazards" being defined to include "imminent loss of physical control of the plant".