June 28, 1991

MEMORANDUM FOR: James M. Taylor
Executive Director for Operations

FROM: Samuel J. Chilk, Secretary /S/

SUBJECT: SECY-90-340 - "DIESEL GENERATOR RELIABILITY," RESOLUTION OF GENERIC SAFETY ISSUE B-56 (COMJC-91-001/001-A)

The Commission (with all Commissioners agreeing) has disapproved the use of a generic letter and the provisions of 10 CFR 50.54(f) as a vehicle for imposing requirements on, or securing enforceable commitments from, power reactor licensees to address Generic Safety Issue B-56. The need to establish a firm legal basis for the regulatory action, is such that this issue should be addressed through rulemaking.

With respect to the approach to be taken in addressing the issue of emergency diesel generator (EDG) reliability, the Commission has endorsed a results-oriented approach, consistent with the approach taken in the maintenance rule, that will focus on the overall objective of demonstrated EDG reliability, in lieu of the approach recommended by the staff in SECY-90-340. Accordingly, the staff should prepare for Commission approval a proposed rule and regulatory guidance as necessary in accordance with the approach outlined below.
(EDO) **(SECY SUSPENSE: 12/91)**

The approach endorsed by the Commission would consist of the following fundamental elements: (1) target reliability levels would be established for each licensee's EDGs (these reliability levels would comport with the reliability levels assumed in a licensee's coping analysis for station blackout (SBO)); (2) trigger values would be established with respect to EDG failures, to serve two purposes -- to provide an "early warning" of EDG degradation, and to provide a basis for taking regulatory action

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(including the possibility of enforcement action) when it becomes clear that the target reliability level is not being met by a licensee (a more detailed discussion of the trigger values is set forth below); (3) a reporting regime would be established in accordance with the approach specified above.

The "early warning" trigger values should be used for the purpose of detecting potential diesel generator degradation at an early stage. These trigger values would consist of a requirement that licensees -- (i) report diesel failures to the NRC when such failures reach 3 failures out of 20 starts, measured on either a per unit or a per diesel basis; and (ii) undertake accelerated testing, as well as submit a report to NRC, in the event that diesel failures reach 4 out of 25 failures, measured on an individual diesel basis. Unlike the double trigger values established below -- which provide a clear indication that the true underlying reliability may have fallen below the target reliability -- activation of the "early warning" trigger values would not serve as a basis for taking regulatory action. These trigger values would serve strictly as an "early warning" mechanism to flag a potential decline in diesel generator reliability. If a "double trigger" value of 5 failures out of 50 starts and 8 failures out of 100 starts (at a .95 reliability target) or 4 failures out of 50 starts and 5 failures out of 100 starts for licensees (at a .975 reliability target) applied on a unit basis (i.e., to the aggregate of all diesels at a given unit rather than to each individual diesel), is exceeded, it would provide a clear indication for concluding that the underlying reliability levels assumed in the SBO submittals have not been met. Failure to meet the specified double trigger values would serve as the basis for taking regulatory action, including the possibility of enforcement action.

At the time that the staff submits the proposed rule for Commission approval, staff should identify proposed regulatory actions to be taken, including possible enforcement action, when the "double trigger" criterion is met.

The Staff should address the industry's request for relief from the current accelerated testing requirements for a problem diesel generator, as discussed in NUMARC's May 21, 1991 letter to Commissioner Curtiss.

(EDO) **(SECY SUSPENSE: 10/15/91)**

cc: Chairman Carr
Commissioner Rogers
Commissioner Curtiss
Commissioner Remick
OGC
GPA

ACRS