

Central File



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

February 25, 1981

TO ALL LICENSEES OF OPERATING NUCLEAR POWER REACTORS AND APPLICANTS FOR  
OPERATING LICENSES (EXCEPT FOR ST. LUCIE UNIT NOS. 1 & 2)

SUBJECT: EMERGENCY PROCEDURES AND TRAINING FOR STATION BLACKOUT EVENTS  
(Generic Letter 81-04)

A recent decision by the Atomic Safety and Licensing Appeal Board (ALAB-603) concluded that station blackout (i.e., loss of all offsite and onsite AC power) should be considered a design basis event for St. Lucie Unit No. 2. An amendment to the Construction Permit for St. Lucie Unit No. 2 was subsequently issued on September 18, 1980. The NRC staff is currently assessing station blackout events on a generic basis (Unresolved Safety Issue A-44). The results of this study, which is scheduled to be completed in 1982, will identify the extent to which design provisions should be included to reduce the potential for or consequences of a station blackout event.

However, the Board has recommended that more immediate measures be taken to ensure that station blackout events can be accommodated while task A-44 is being conducted. Although we believe that, qualitatively, there appears to be sufficient time available following a station blackout event to restore AC power, we are not sure if licensees have adequately prepared their operators to act during a station blackout event.

Consequently, we request that you review your current plant operations to determine your capability to mitigate a station blackout event and promptly implement, as necessary, emergency procedures and a training program for station blackout events. Your review of procedures and training should consider, but not be limited to:

- a. The actions necessary and equipment available to maintain the reactor coolant inventory and heat removal with only DC power available, including consideration of the unavailability of auxiliary systems such as ventilation and component cooling.
- b. The estimated time available to restore AC power and its basis.
- c. The actions for restoring offsite AC power in the event of a loss of the grid.
- d. The actions for restoring offsite AC power when its loss is due to postulated onsite equipment failures.

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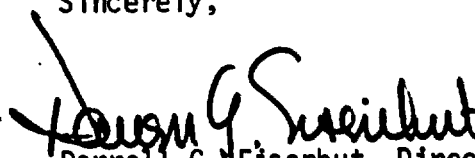
- e. The actions necessary to restore emergency onsite AC power. The actions required to restart diesel generators should include consideration of loading sequence and the unavailability of AC power.
- f. Consideration of the availability of emergency lighting, and any actions required to provide such lighting, in equipment areas where operator or maintenance actions may be necessary.
- g. Precautions to prevent equipment damage during the return to normal operating conditions following restoration of AC power. For example, the limitations and operating sequence requirements which must be followed to restart the reactor coolant pumps following an extended loss of seal injection water should be considered in the recovery procedures.

The annual requalification training program should consider the emergency procedures and include simulator exercises involving the postulated loss of all AC power with decay heat removal being accomplished by natural circulation and the steam-driven auxiliary feedwater system for PWR plants, and by the steam-driven RCIC and/or HPCI and the safety-relief valves in BWR plants.

We conclude that the actions described above should be completed as soon as they reasonably can be (i.e., within 6 months). In addition, so that we may determine whether your license should be amended to incorporate this requirement, you are requested, pursuant to §50.54(f), to furnish within ninety (90) days of receipt of this letter, an assessment of your existing or planned facility procedures and training programs with respect to the matters described above. Please refer to this letter in your response. In the event that completion within 6 months can not be met, please propose a revised date and justification for the delay.

This request for information was approved by GAO under a blanket clearance number R0072 which expires November 30, 1983. Comments on burden and duplication may be directed to the U.S. General Accounting Office, Regulatory Reports Review, Room 5106, 441 G Street, NW., Washington, D.C. 20548.

Sincerely,



Darrell G. Eisenhut, Director  
Division of Licensing  
Office of Nuclear Reactor Regulation