



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

MAR 5 1984

MEMORANDUM FOR: Thomas M. Novak, Assistant Director for Licensing, Division  
of Licensing

FROM: L. S. Rubenstein, Assistant Director for Core and Plant  
Systems, Division of Systems Integration

SUBJECT: BYRON/BRAIDWOOD STATION, UNITS 1 AND 2 - COMPLIANCE WITH THE  
FIRE PROTECTION REQUIREMENTS OF SKP SECTION 9.5.1

In response to a request from Region III through DL, the Auxiliary Systems Branch participated in the region's inspection of Byron, Unit 1 to determine compliance with the fire protection criteria. During the course of the inspection and follow-up meetings, the applicant indicated that their fire protection report may not accurately reflect as-built plant conditions. The inspection and follow-up meetings also indicated that revisions to the applicant's fire protection report and the applicant's response to some of NRR's questions were not incorporated into NRR's safety evaluation report. The region will be referring these issues and related issues from the inspection to NRR for resolution. Therefore, we have re-reviewed the Byron/Braidwood fire protection report and associated revisions and responses, and prepared the enclosed request for additional information. We are available to meet with the applicant to discuss our concerns.

L. S. Rubenstein, Assistant Director  
for Core and Plant Systems  
Division of Systems Integration

Enclosure:  
As Stated

cc w/enclosure

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REQUEST FOR ADDITIONAL INFORMATION  
BYRON/BRAIDWOOD STATIONS, UNITS 1 AND 2  
AUXILIARY SYSTEMS BRANCH

- 10.60 The inspection of Byron, Unit 1 indicated that the information provided in the fire protection report may not reflect as built condition. For as built conditions, provide a list of all fire areas containing redundant safe shutdown equipment or cabling (power, control and instrumentation) including associated circuits, for each of the Byron/Braidwood units.
- 10.61 The inspection of Byron, Unit 1 and the fire protection report indicate extensive reliance on manual operations for safe shutdown; however, procedures have not been developed. For each fire area of the Byron/Braidwood units, provide a summary of the post-fire operator actions necessary for safe shutdown and the location of the operator actions. For fire areas containing redundant safe shutdown equipment for two units or shared equipment, address the actions necessary for safe shutdown of both units.
- 10.62 The response to Question 10.55 provided by Amendment 39, regarding operator response to plant transients caused by fire-induced spurious operation of equipment does not provide sufficient detail. For each fire area, identify the plant transients that could be initiated by fire-induced spurious operation of equipment. Identify the instrumentation available to the operator to assess the transient and necessary corrective actions to be taken. Identify how the corrective actions would be integrated into the shutdown actions identified for Question 10.61.
- 10.63 The fire protection report, Section 2.4.1.6, indicates that the ability exists to achieve and maintain hot shutdown independent of each fire zone, without taking credit for repairs. However, the June 17, 1983 revision of the report indicates that repairs are necessary to overcome fire-induced spurious operation of the pressurizer PORV. SRP Section 9.5.1 requires that one train of systems necessary to achieve and maintain hot standby/shutdown be free of fire damage. Provide a description of the design modifications necessary to prevent spurious operation of the PORV or describe the operator actions necessary to overcome spurious operation of the PORV without repairs. Additionally, verify that the operator actions identified in Questions 10.61 and 10.62 do not require repairs to achieve and maintain hot shutdown conditions.