Docket No. 50-315
and 50-316

DISTRIBUTION
DOCKET FILE
NRC & LOCAL PDRs
PD31 GRAY FILE
GHOLAHAN
MVIRGILIO
RINGRAM
JGIITTER
OGC
EJORDAN
BGRIMES
ACRS(10)
DKUBICKI

Mr. Milton P. Alexich
Indiana Michigan Power Company
c/o American Electric Power
Service Corporation
1 Riverside Plaza
Columbus, Ohio 43216

Dear Mr. Alexich:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION-POST-FIRE SAFE SHUTDOWN METHODOLOGY, D. C. COOK NUCLEAR PLANT (TACS NOS. 65161 AND 65162)

By letter dated February 12, 1987, American Electric Power Company (AEP) submitted a revised report on the post fire safe shutdown methodology. Included with this information were revised exemption requests from the requirements of Section III.G of Appendix R to 10 CFR 50 and numerous fire hazards analyses which purport to justify non-fire-rated features in plant fire barriers. Because of the nature and extent of the new information contained in this submittal, the NRC staff reviewed the safe shutdown methodology in accordance with the existing fire protection criteria in Appendix R along with the guidance issued in Generic Letter 81-12 and 86-10. In order to complete our evaluation of this information, the staff requires clarification on several issues. Accordingly, the staff has prepared the enclosed request for additional information which identifies a number of issues where AEP's approach is not in conformance with the above-referenced guidelines and which the staff cannot except in the absence of sufficient additional justification. The staff requests that a meeting be arranged, preferably at the Cook site, to discuss these issues in detail.

The request in this letter affects fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Joseph G. Giitter, Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

DF01
1/1

*See previous concurrence

LA/PD31:DRSP	*PM/PD31:DRSP	*(A)D/PD31:DRSP
RINGRAM	JGIITTER	JTHOMA
9/13/89	9/13/89	9/13/89

September 14, 1989

Docket No. 50-315
and 50-316

DISTRIBUTION
DOCKET FILE
NRC & LOCAL PDRs
PD31 GRAY FILE
GHOLAHAN
MVIRGILIO
RINGRAM
JGIITTER
OGC
EJORDAN
BGRIMES
ACRS(10)
DKUBICKI

Mr. Milton P. Alexich
Indiana Michigan Power Company
c/o American Electric Power
Service Corporation
1 Riverside Plaza
Columbus, Ohio 43216

Dear Mr. Alexich:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION-POST-FIRE SAFE SHUTDOWN METHODOLOGY, D. C. COOK NUCLEAR PLANT (TACS NOS. 65161 AND 65162)

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION-POST-FIRE SAFE SHUTDOWN METHODOLOGY, D. C. COOK NUCLEAR PLANT (TACS NOS. 65161 AND 65162)

By letter dated February 12, 1987, American Electric Power Company (AEP) submitted a revised report on the post fire safe shutdown methodology. Included with this information were revised exemption requests from the requirements of Section III.G of Appendix R to 10 CFR 50 and numerous fire hazards analyses which purport to justify non-fire-rated features in plant fire barriers. Because of the nature and extent of the new information contained in this submittal, the NRC staff reviewed the safe shutdown methodology in accordance with the existing fire protection criteria in Appendix R along with the guidance issued in Generic Letter 81-12 and 86-10. In order to complete our evaluation of this information, the staff requires clarification on several issues. Accordingly, the staff has prepared the enclosed request for additional information which identifies a number of issues where AEP's approach is not in conformance with the above-referenced guidelines and which the staff cannot except in the absence of sufficient additional justification. The staff requests that a meeting be arranged, preferably at the Cook site, to discuss these issues in detail.

The request in this letter affects fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Original signed by

Joseph G. Giitter, Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

LA/PD31:DRSP
RINGRAM
9/13/89

PM/PD31:DRSP
JGIITTER
9/13/89

(A)D/PD31:DRSP
JTHOMA
9/13/89

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

September 14, 1989

Dockets Nos. 50-315
and 50-316

Mr. Milton P. Alexich
Indiana Michigan Power Company
c/o American Electric Power
Service Corporation
1 Riverside Plaza
Columbus, Ohio 43216

Dear Mr. Alexich:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION-POST-FIRE SAFE SHUTDOWN METHODOLOGY, D. C. COOK NUCLEAR PLANT (TACS NOS. 65161 AND 65162)

By letter dated February 12, 1987, American Electric Power Company (AEP) submitted a revised report on the post fire safe shutdown methodology. Included with this information were revised exemption requests from the requirements of Section III.G of Appendix R to 10 CFR 50 and numerous fire hazards analyses which purport to justify non-fire-rated features in plant fire barriers. Because of the nature and extent of the new information contained in this submittal, the NRC staff reviewed the safe shutdown methodology in accordance with the existing fire protection criteria in Appendix R along with the guidance issued in Generic Letter 81-12 and 86-10. In order to complete our evaluation of this information, the staff requires clarification on several issues. Accordingly, the staff has prepared the enclosed request for additional information which identifies a number of issues where AEP's approach is not in conformance with the above-referenced guidelines and which the staff cannot except in the absence of sufficient additional justification. The staff requests that a meeting be arranged, preferably at the Cook site, to discuss these issues in detail.

The request in this letter affects fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Joseph G. Giitter

Joseph G. Giitter, Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

Mr. Milton Alexich
Indiana Michigan Power Company

Donald C. Cook Nuclear Plant

cc:
Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Mr. S. Brewer
American Electric Power
Service Corporation
1 Riverside Plaza
Columbus, Ohio 43216

Attorney General
Department of Attorney General
525 West Ottawa Street
Lansing, Michigan 48913

Township Supervisor
Lake Township Hall
Post Office Box 818
Bridgman, Michigan 49106

W. G. Smith, Jr., Plant Manager
Donald C. Cook Nuclear Plant
Post Office Box 458
Bridgman, Michigan 49106

U.S. Nuclear Regulatory Commission
Resident Inspectors Office
7700 Red Arrow Highway
Stevensville, Michigan 49127

Gerald Charnoff, Esquire
Shaw, Pittman, Potts and Trowbridge
2300 N Street, N.W.
Washington, DC 20037

Mayor, City of Bridgman
Post Office Box 366
Bridgman, Michigan 49106

Special Assistant to the Governor
Room 1 - State Capitol
Lansing, Michigan 48909

Nuclear Facilities and Environmental
Monitoring Section Office
Division of Radiological Health
Department of Public Health
3500 N. Logan Street
Post Office Box 30035
Lansing, Michigan 48909

ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION-SAFE SHUTDOWN METHODOLOGY
D. C. COOK NUCLEAR PLANT, UNITS 1 AND 2
TACS NOS. 65161 AND 65162

1. Will all fire barriers which are necessary to satisfy the criteria of Appendix A to Branch Technical Position APCSB 95-1 and Section III.G of Appendix R to 10 CFR 50 be maintained and surveilled under the provisions of the plant Technical Specifications?

2 The licensee states that a separation analysis of the HVAC system was not required. The staff is concerned that a fire could result in the loss of ventilation to safe shutdown components, resulting in failure of redundant systems. Provide the technical justification to support the conclusion that a separation analysis was not necessary.

3. Provide a list of any safe shutdown components, such as valve assemblies and heat exchangers, that are assumed not to be damaged by fire regardless of existing fire protection features.

4. The licensee's submittal has not identified any diagnostic instrumentation as being required for post-fire-safe shutdown. This does not appear to be consistent with the methodology described. Identify such instrumentation and summarize how the taking of readings has been incorporated in the emergency shutdown procedures.

5. For a fire in a number of locations, such as area 1, the licensee appears to be taking credit for manual actions to achieve safe shutdown. These actions are required to be taken in the fire area itself. Identify all such locations, the time to achieve this action before an unrecoverable plant condition occurs and the justification to support the conclusion that entry into the fire area is achievable.

6. The licensee also appears to be taking credit for manual actions outside of the fire areas, such as those associated with mitigating the consequences of spurious, fire-induced signals. The staff is concerned that a sufficient safety margin of time may not be available between the occurrence of a fire and an unrecoverable plant condition that is prevented by the manual action. Identify all such manual actions that must occur within the first half hour of a fire event.

7. The licensee has not clearly described how common enclosure type associated circuits have been protected against fire damage. The licensee appears to indicate that non-fire propagating type cable insulation will preclude damage. This is not consistent with the guidance issued in Generic Letter 81-12. For these types of associated circuit indicate how the guidance in the generic letter has been satisfied.

8. The licensee's assumptions regarding the low probability of three phase and single phase - a.c. faults (cases 1 and 4 of the 1987 submittal) are not consistent with the guidance issued in Generic Letter 86-10. Three phase - a.c. cable-to-cable faults need be considered credible for hi-low pressure interfaces only. Describe how spurious signals resulting from such faults will be mitigated to assure the post-fire viability of the safe shutdown capability.

9. The licensee states that the RHR system is required for hot shutdown and that repairs will be implemented following a fire. This is not consistent with the criteria delineated in Section III.L of Appendix R. The licensee should clarify the need for any repairs associated with achieving hot shutdown conditions following a fire.

10. Provide a description as to how the hot shutdown panel area is electrically independent from the control room. The staff is concerned that a fire in this area will adversely affect the shutdown capability from the control room.

11. What precautions have been taken to preclude water from fire fighting activities from flowing down through the hatchways and damaging redundant safe shutdown systems below?

12. Are all proposed fire protection modifications being implemented in accordance with the applicable NFPA standards (detection and suppression system) and manufacturers installation practices (cable wraps)?

13. What testing, if any, has been performed on the field fabricated fire damper referenced in Section 9.7?