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 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316
 AUTH. NAME: AUTHOR AFFILIATION
 ALEXICH, M.P. Indiana & Michigan Electric Co.
 RECIP. NAME: RECIPIENT AFFILIATION
 DENTON, H.R. Office of Nuclear Reactor Regulation, Director

SUBJECT: Forwards Suppl. 2 to "App. R Evaluation of Auxiliary Bldg HVAC
 Duct Penetration & Containment Seismic Gaps," providing
 justification for technical exemptions requested in 840615
 ltr.

DISTRIBUTION CODE: A006S COPIES RECEIVED: LTR 1 ENCL 5 ^{ON SHIP} SIZE: 2+5
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	NRR/DE/CEB	09	2	2	NRR/DL DIR		1	1	
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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

INDIANA & MICHIGAN ELECTRIC COMPANY

P.O. BOX 16631
COLUMBUS, OHIO 43216

August 13, 1984
AEP:NRC:0692U

Donald C. Cook Nuclear Plant Unit Nos. 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-48 and DPR-74
APPENDIX R TECHNICAL EXEMPTION FOR SEISMIC
GAPS AND HVAC DUCT PENETRATIONS

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Denton:

In our June 15, 1984 letter to you we requested technical exemption for two areas of 10 CFR 50 Appendix R. These areas include (1) ventilation duct penetrations not supplied with fire dampers, and (2) seismic gaps between the containment and auxiliary buildings.

Attached is Supplement 2 to the March 3, 1983, Report entitled "Safe Shutdown Capability Assessment and Proposed Modifications" for the D. C. Cook Nuclear Plant. This supplement, prepared by our Consultant Engineering Planning and Management, Inc. (EPM), is a detailed engineering evaluation which provides justification for the technical exemptions requested in our June 15, 1984 letter. The following summarizes the findings of the attached evaluation.

VENTILATION DUCTS: The evaluation concludes that, because of a low combustible loading of less than 15 minutes in all applicable fire areas/zones, the location of safe shutdown components/circuits and the detection and suppression systems available in the subject fire area/zones, adequate protection from duct related fire damage is provided and safe shutdown capability is ensured. As discussed with your staff, the evaluation includes five additional ventilation duct penetrations without fire dampers, that also require technical exemptions. These duct penetrations listed below were not identified in the June 15, 1984 letter.

| <u>No. of</u>
<u>Penetrations</u> | <u>Size of</u>
<u>Duct</u> | <u>Elevation</u> | <u>Location</u> |
|--------------------------------------|-------------------------------|------------------|-----------------|
| 2 | 28" x 34" | 650' | Auxiliary Bldg |
| 2 | 22" x 34" | 650' | Auxiliary Bldg |
| 1 | 44" x 24" | 633' | Auxiliary Bldg |

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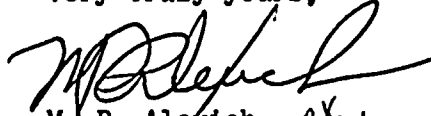
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SEISMIC GAPS: The evaluation concludes that, because of the distance between fire areas/zones, low combustible loading, the location of combustible loading and/or the presence of detection and suppression systems within the areas/zones, the seismic gaps can be left as discussed in the report without compromising the capability of the plant to be safely shutdown in the event of a fire.

In addition, in our June 15, 1984 letter we committed to review whether the analyses performed to show that the auxiliary building would not be affected by the consequences of High Energy Line Breaks took credit for available relief area associated with seismic gaps. This review has shown that these analyses did not take credit for the seismic gaps. However, the gaps were considered in the structural analysis.

This letter has been prepared following Corporate procedures which incorporate a reasonable set of controls to insure its accuracy and completeness prior to signature by the undersigned.

Very truly yours,


M. P. Alexich RBK
Vice President 8/13/84

MPA/cm

Attachments

cc: John E. Dolan
W. G. Smith, Jr.
R. C. Callen
G. Charnoff
E. R. Swanson, NRC Resident Inspector - Bridgman

