REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8406210349 DOC.DATE: 84/06/15 NOTARIZED: NO DOCKET #
FACIL:50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana & 05000315
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: Requests addl technical exemption from App R requirements re penetration seals in seismic gaps between containment & auxiliary bldg & ventilation ducts that penetrate fire barriers.

DISTRIBUTION CODE: A006S COPIES RECEIVED:LTR 1 ENCL 0 SIZE: 2
TITLE: OR Submittal: Fire Protection

NOTES:

	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL
	NRR ORB1 BC	01	3	3				
INTERNAL:	ELD/HDS3		1	0	IE FILE	06	1	1
	IE/WHITNEY,L		1	1	NRR FIORAVANT	07	2	2
	NRR WAMBACH		1	0	NRR/DE/CEB	09	2	2
	NRR/DL DIR		1	1	REG FILE	04	1	1
	RGN3		1	1				
EXTERNAL:	ACRS	11	3	3	LPDR	03	2	2
	NRC PDR	02	1	1	NSIC	05	1	1
	NTIS		1	1				

TOTAL NUMBER OF COPIES REQUIRED: LTTR 22 ENCL 20

INDIANA & MICHIGAN ELECTRIC COMPANY

P.O. BOX 16631
COLUMBUS, OHIO 43216

June 15, 1984
AEP:NRC:0692R

Donald C. Cook Nuclear Plant Unit Nos. 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
REQUEST FOR ADDITIONAL TECHNICAL EXEMPTIONS WITH
REGARD TO CERTAIN FIRE DAMPERS AND "SEISMIC GAPS"

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

Dear Mr. Denton:

The purpose of this letter is to request technical exemption for two areas of Appendix R. The areas involved are (1) penetration seals in the seismic gaps between the containment and the auxiliary building, and (2) ventilation ducts identified in this letter which penetrate fire barriers.

The need for additional exemptions was just recently discovered. From discussions with our fire protection consultant we believe these conditions are minor deviations from the literal requirements of Appendix R.

The seismic gaps were originally designed at the Donald C. Cook Nuclear Plant to assure that the containment and auxiliary building would be decoupled following a design basis earthquake so that the movement of one building would not adversely affect the other. In addition, as part of the design basis of the plant, analyses had to be performed to show that the auxiliary building would not be adversely affected by the consequences of High Energy Line Breaks outside containment. It is our current belief that some of these analyses took credit for available relief area associated with the gaps. We are currently reviewing our records to determine whether this in fact was done. We will advise you accordingly. If we had to provide continuous fire protection by sealing those gaps, this would be an extreme burden because of the additional structural and thermohydraulic analyses required to substantiate that the plant was still within the envelope of its original design criteria.

A006
1/0

We believe that we can provide adequate engineering justification to show that the seismic gaps can be left open without destroying the capability of the plant to be safely shutdown in the event of a fire. However, our detailed technical justification for the seismic gap exemption does not accompany this letter because of the time required to complete these analyses. We anticipate that the results of these analyses will be available on July 16, 1984.

In the area of HVAC ductwork, we have recently discovered that technical exemptions are required for 17 ducts which penetrate fire barriers. These areas are typified by low combustible loading, and duct outlets being located in an area sufficiently removed from equipment important to the safe shutdown of the facility. Sound engineering evaluations can be used to justify our request for technical exemption of the requirements for fire dampers.

As of now seventeen (17) duct penetrations have been identified as falling into that category. They include:

No. of Penetrations	Size of Duct	Elevation	Location	
4	45" x 35"	650'-0"	Auxiliary	Building
2	40" x 40"	650'-0"	"	"
2	36" x 36"	650'-0"	"	"
2	52" x 24"	609'-0"	"	"
1	72" x 30"	609'-0"	"	"
1	34" x 30"	609'-0"	"	"
1	36" x 24"	609'-0"	"	"
1	44" x 24"	609'-0"	"	"
1	24" x 30"	609'-0"	"	"
1	25" x 28"	587"-0"	"	"
1	26" x 30"	587"-0"	"	"

Since we only recently discovered this problem, we have not had time to complete the required engineering evaluation. This evaluation is also scheduled for completion by July 16, 1984.

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

Very truly yours,

M. P. Alexich 6/15/84
Vice President

MPA/cm

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