REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8008180498 DOC.DATE: 80/08/11 NOTARIZED: NO DOCKET #
FACIL:50-220 Nine Mile Point Nuclear Station, Unit 1, Niagara Powe 05000220
AUTH.NAME AUTHOR AFFILIATION
DISE,D.P.. Niagara Mohawk Power Corp.
RECIP.NAME RECIPIENT AFFILIATION
IPPOLITO,T.A. Operating Reactors Branch 2

SUBJECT: Discusses discrepancies between Util & NRC re fire protection sprinkler sys.Proposed encapsulation of diesel generator 102 control cables unacceptable.Industrial Testing Lab Inc test rept using pyrocrete encapsulation encl.

DISTRIBUTION CODE: A006S COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 2+7
TITLE: Fire Protection Information (After Issuance of OP. Lic.)

NOTES:

	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL
ACTION:	IPPOLITO,T.		3	3				
INTERNAL:	CHEM ENG BR-A		5	5	D/DIR,HUM FAC S		1	1
	I&E	09	2	2	NRC PDR	02	1	1
	OELD		1	0	REG FILE	01	1	1
	WAMBACH,T.		1	1				
EXTERNAL:	ACRS	22	16	16	LPDR	03	1	1
	NSIC	04	1	1				

AUG 19 1980

TOTAL NUMBER OF COPIES REQUIRED: LTTR 33 ENCL 32

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

August 11, 1980

Mr. Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Nine Mile Point Unit 1
Docket No. 50-220
DPR-63

Dear Mr. Ippolito:

Your letters of July 22 and July 30, 1980 indicated certain discrepancies between Niagara Mohawk and the Nuclear Regulatory Commission concerning fire protection. The purpose of this letter is to address these items.

Your letter of July 30, 1980 indicates two areas which should be protected by sprinkler systems. Niagara Mohawk plans to install pre-action sprinkler systems, which meet NFPA-13 in these areas.

The July 22, 1980 letter states that the proposed encapsulation of diesel generator 102 control cables is unacceptable. Niagara Mohawk has additional information which further justifies that the encapsulation of these cables with pyrocrete is an appropriate method of protection.

The attached test report from Industrial Testing Laboratories, Inc. shows that two inches of "pyrocrete 241" will reach 250°F above ambient in 264 minutes. Although this test was not in complete agreement with ASTM E-119 (it did not mock up the geometry nor include a hose stream test), Niagara Mohawk believes the test results have adequate margin to warrant encapsulation in this application. The actual geometry is shown on Niagara Mohawk Drawing No. C-27153-C attached. From the drawing, it is shown that our configuration has a large heat sink as compared to the test specimen. The application of a hose stream test is of little significance, since this material has been subjected to hose stream tests in other applications.

Section IIIM Fire Barriers of proposed 10CFR50 Appendix R, states that fire barriers shall have a fire rating of three hours unless a lower rating is justified by the fire hazard analysis. The fire load study of the hazard analysis for Nine Mile Point Unit 1, which was transmitted to the Nuclear Regulatory Commission in March of 1977, shows a fire load of 48 minutes. This low fire load further justifies the application of this pyrocrete rather than rerouting these output cables.

A006
S
1/1

8008180498 F

It is also noted that all of the cables in the encapsulation are coated with a flame retardant material. This flame retardant material will assist in maintaining the cables at a temperature lower than that being experienced within the cable barrier.

Based upon the construction arrangement, the thermal penetration data in the test, the relative low fire load and the presence of flame retardant material, Niagara Mohawk requests that approval of this encapsulation be granted. In order to protect these cables on a timely basis, Niagara Mohawk requests a response to this item by September 1, 1980.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

D. P. Dise,
Vice President - Engineering

GJG:ja