

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8610160393 DOC. DATE: 86/10/10 NOTARIZED: YES DOCKET #
 FACIL: 50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha 05000410
 AUTH. NAME AUTHOR AFFILIATION
 MANGAN, C. V. Niagara Mohawk Power Corp.
 RECIP. NAME RECIPIENT AFFILIATION
 ADENSAM, E. G. BWR Project Directorate 3

SUBJECT: Responds to questions re penetration seals including seal matl, aging, lifetime, replacement & basis for 18-month insp interval.

DISTRIBUTION CODE: B001D COPIES RECEIVED: LTR 1 ENCL 0 SIZE: 3
 TITLE: Licensing Submittal: PSAR/FSAR Amdts & Related Correspondence

NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID	CODE/NAME	L	T		ID	CODE/NAME	L	T
	BWR	EB	1	1		BWR	EICSB	2	2
	BWR	FOB	1	1		BWR	PD3 LA	1	1
	BWR	PD3 PD	1	1		HAUGHEY, M	01	2	2
	BWR	PSB	1	1		BWR	RSB	1	1
INTERNAL:	ACRS	41	6	6		ADM/LFMB		1	1
	ELD/HDS3		1	1		IE FILE		1	1
	IE/DEPER/EPB	36	1	1		IE/DGAVT/QAB	21	1	1
	NRR BWR ADTS		1	1		NRR PWR-B ADTS		1	1
	NRR RGE, M. L		1	1		NRR/DHFT/MTB		1	1
	REG FILE	04	1	1		RGN1		3	3
	RM/DDAMI/MIB		1	1					
EXTERNAL:	BNL (AMDTs ONLY)		1	1		DMB/DSS (AMDTs)		1	1
	LPDR	03	1	1		NRC PDR	02	1	1
	NSIC	05	1	1		PNL GRUEL, R		1	1

TOTAL NUMBER OF COPIES REQUIRED: LTR 36 ENCL 0

1000000000

STATE OF TEXAS
COUNTY OF DALLAS
I, the undersigned, Clerk of the County of Dallas, State of Texas, do hereby certify that the within and foregoing is a true and correct copy of the original as the same appears in the records of the County of Dallas, State of Texas.

Witness my hand and the seal of the County of Dallas, State of Texas, this _____ day of _____, 19____.

CLERK OF COUNTY

DATE	DESCRIPTION	AMOUNT	REMARKS
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000

NMP2L 0905
October 10, 1986

Ms. Elinor G. Adensam, Director
BWR Project Directorate No. 3
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Washington, DC 20555

Dear Ms. Adensam:

Re: Nine Mile Point Unit 2
Docket No. 50-410

In response to concerns expressed by your staff, the following information is provided:

- Question 1) Are there double seals on all penetrations?
Response 1) Double seals are only used for penetrations between double walls separated by a rattle joint or for penetrations with multiple requirements that cannot be achieved by the use of a single seal.
- Question 2) What is the penetration seal material?
Response 2) All of the penetration seals are constructed of silicone rubber, although the form in which the rubber product is used varies between the various type of penetrations. It is used as a solid rubber product, a foamed rubber, and as an elastomeric coating on fiberglass fabric.
- a. Elastomer/Caulk - Dow Corning Sylgard 170 A&B Silicone Elastomer with Dow Corning 96-081 RTV Silicone Adhesive/Sealant Caulk and/or Dow Corning 790 caulk.
 - b. Air Boot - Silicone Boot of KCF Grade 56493F031 or CHR Grade 4032 with Dow Corning 732 or 795 caulk.
 - c. Silicone Foam - Dow Corning 3-6548 RTV Silicone Foam.
 - d. Product 90/Caulk - ICMS Product 90 (Silicone Elastomer) 150 lb/ft minimum density with Dow Corning 790 caulk.
 - e. Fire Boot - Cloth Boot of Carborundum Fibersil Cloth 36-400 U, with Silicone Boot of KCF Grade 56493F031 or CHR Grade 4032, with Dow Corning 795 or 732 caulk.

B610160393 B610101
PDR ADCK 05000410
A PDR

Boo1
110

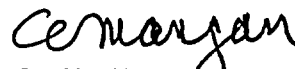


1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960

1961
1962
1963
1964
1965
1966
1967
1968
1969
1970

- Question 3) How does this material age?
Response 3) Some loss of tensile strength and elongation will occur at elevated radiation exposure and elevated temperatures.
- Question 4) What is the expected lifetime of the seal?
Response 4) The materials used in these seals have a radiation qualified life of 40 years and a thermal aging life of 40 years. Although some loss of mechanical properties is evident, these seals will perform throughout the design lifetime of the plant.
- Question 5) How was the 18-month inspection interval determined?
Response 5) The 18-month inspection interval is based upon consistency and continuity with similar inspection criteria for fire seals as outlined in Technical Specification 4.7.8.1.
- Question 6) Why should they not be checked more often?
Response 6) The penetration seals are environmentally qualified for at least 40 years. The 18-month inspection period was implemented to ensure that any abnormal or unanticipated damage can be repaired in a timely manner. Niagara Mohawk does not feel that a more frequent inspection period is warranted.
- Question 7) When will the material be replaced?
Response 7) If, during periodic inspection, the seals are found to have unacceptable damage or degradation, they will be repaired or replaced as appropriate. Seals will also be replaced if removal or replacement of the penetrating items becomes necessary and reuse of the seal is not acceptable.

Very truly yours,



C. V. Mangak
Senior Vice President

TS/pns
2124G

xc: W. A. Cook, NRC Resident Inspector
Project File (2)



1974

1974

1974

1974

1974

1974

1974

1974

1974

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
Niagara Mohawk Power Corporation)
(Nine Mile Point Unit 2))

Docket No. 50-410

AFFIDAVIT

C. V. Mangan, being duly sworn, states that he is Senior Vice President of Niagara Mohawk Power Corporation; that he is authorized on the part of said Corporation to sign and file with the Nuclear Regulatory Commission the documents attached hereto; and that all such documents are true and correct to the best of his knowledge, information and belief.

C. Mangan

Subscribed and sworn to before me, a Notary Public in and for the State of New York and County of Onondaga, this 10th day of October, 1986.

Christine Austin
Notary Public in and for
Onondaga County, New York

My Commission expires:
CHRISTINE AUSTIN
Notary Public in the State of New York
Qualified in Onondaga Co. No. 4787687
My Commission Expires March 30, 1987

SECRET
NO FORN DISSEM
NO UNCLASSIFIED