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 AUTH. NAME: AUTHOR AFFILIATION  
 MANGAN, C.V. Niagara Mohawk Power Corp.  
 RECIP. NAME: RECIPIENT AFFILIATION  
 SCHWENCER, A. Licensing Branch 2

SUBJECT: Forwards revised tables for dose assessment re SER Open  
 Item 120. Info will be included in next FSAR amend.

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September 28, 1984  
(NMP2L 0175)

Mr. A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Schwencer:

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

Enclosed are the revised tables for Dose Assessment, which is information related to Safety Evaluation Report open item 120.

The enclosed will be included in the next Final Safety Analysis Report Amendment.

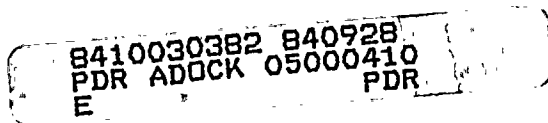
Very truly yours,

*C. V. Mangan*

C. V. Mangan  
Vice President  
Nuclear Engineering & Licensing

DS:ja  
Enclosure

cc: Project File (2)



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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 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 28<sup>th</sup> day of September 1984.

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. 4787627  
My Commission Expires March 30, 1985

CHRISTINE AUSTRI  
History Public in the State of New York  
Qualified in Ontario Co. No. 418193  
My Commission Expires March 30, 19\_\_

Nine Mile Point Unit 2 FSAR

TABLE 12.4-5

OCCUPATIONAL DOSE ESTIMATES DURING ROUTINE OPERATIONS AND SURVEILLANCE

<u>Activity</u>	<u>Avg. Dose Rate (mrem/hr)</u>	<u>Exposure Time (hr)</u>	<u>No. of Workers</u>	<u>Frequency</u>	<u>DOSE (MAD-REM/YR)</u>	
Operations Surveillance						1.18
Reactor Building	1.3	1.5	1	2/shift	4.0	1.19
Turbine Building	4.0	2.0	1	2/shift	18.0	1.20
Chemistry Surveillance	0.5	5.5	10	Daily	10.0	1.22
Security Surveys	1.0	0.50	1	1/hr	4.0	1.24
Instrumentation and Controls	0.1	6.00	40	1/day	9.0	1.26
Radiation Protection Surveillance	11.0	19.0	1	1/wk	<u>11.0</u>	1.28 1.29
				Total	56.0	1.31

Amendment

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Nine Mile Point Unit 2 FSAR

TABLE 12.4-6

OCCUPATIONAL DOSE ESTIMATES DURING NON-ROUTINE OPERATIONS AND SURVEILLANCE

Activity	Avg. Dose Rate (mrem/hr)	Exposure Time (hr)	No. of Workers	Frequency	Dose (MAN-REM/YR)	
Equipment Operations						1.18
RWCU System	1.0	60.0	2	1/yr	0.10	1.19
Condensate System	2.2	8.0	2	1/day	13.0	1.20
RHS System	0.2	2.0	2	1/month	0.01	1.21
SFC System	1.0	6.0	2	1/yr	0.01	1.22
ECCS System	0.2	2.5	2	1/month	0.01	1.23
SLS System	1.0	3.0	2	1/month	0.10	1.24
Instrument Calibration						1.26
Instrumentation and Controls	0.2	6.0	40	1/day	18.0	1.27
						1.28
Radiation Monitors						1.30
Linearity Checks	1.0	50.0	1	2/yr	0.10	1.31
Calibration	1.0	225.0	2	1/1.5 yr	0.30	1.32
				Total	32.00	1.34

Amendment

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Nine Mile Point Unit 2 FSAR

TABLE 12.4-8

OCCUPATIONAL DOSE ESTIMATES DURING WASTE PROCESSING (RADWASTE OPERATIONS)

<u>Activity</u>	<u>Avg. Dose Rate (mrem/hr)</u>	<u>Exposure Time (hr)</u>	<u>No. of Workers</u>	<u>Frequency</u> (MAN-REM/YR)	<u>Dose</u>	<u>1.14 1.15</u>
Operation of Liquid Radwaste System	0.5	6.0	3	1/shift	10.0	1.17 1.18
Operation of Solid Radwaste System	0.5	6.0	3	1/shift	10.0	1.20 1.21
DAW Compacting	3.5	6.0	2	2/day	31.0	1.23
Radwaste Shipments	1.0	6.0	2	1/wk	1.0	1.25
DAW Shipments	5.0	16.0	2	1/month	<u>2.0</u>	1.27
				Total	54.0	1.29

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Nine Mile Point Unit 2 FSAR

TABLE 12.4-9

OCCUPATIONAL DOSE ESTIMATES DURING REFUELING

<u>Activity</u>	<u>Avg. Dose Rate (mrem/hr)</u>	<u>Exposure Time (hr)</u>	<u>No. of Workers</u>	<u>Frequency (yr)</u>	<u>Dose (MAN-REM/YR)</u>	
Reactor Disassembly	12.0	75.0	10	1/1.5	6.0	1.15
Reactor Assembly	12.0	150.0	10	1/1.5	12.0	1.16
Fuel Unload	2.0	200.0	8	1/1.5	2.0	1.18
Fuel Load	2.0	180.0	8	1/1.5	2.0	1.20
Fuel Preparation	2.0	100.0	7	1/1.5	1.0	1.22
						1.24
						1.26
						1.28
				Total	23.0	1.30

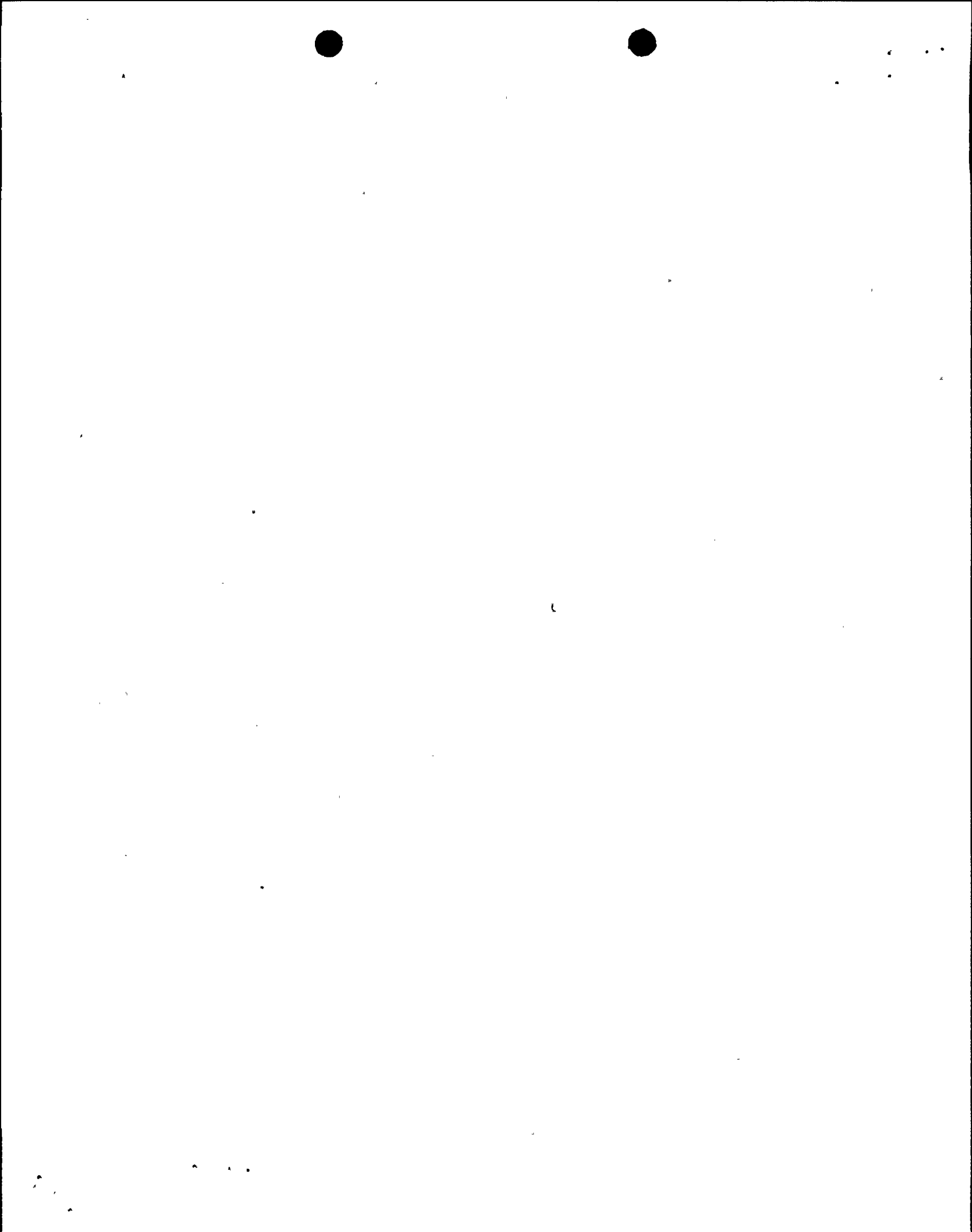
Amendment

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Nine Mile Point Unit 2 FSAR

TABLE 12.4-10

OCCUPATIONAL DOSE ESTIMATES DURING INSERVICE INSPECTION

<u>Activity</u>	<u>Avg. Dose Rate (mrem/hr)</u>	<u>Exposure Time (hr)</u>	<u>No. of Workers</u>	<u>Frequency (Yr)</u>	<u>Dose (MAN-REM/YR)</u>	
Reactor Building - Primary Containment	100.00	150	7	1/1.5	70.0	1.15 1.16
Reactor Building - Secondary Containment	10.00	580	8	1/refueling	31.0	1.18 1.19
Turbine and Miscel- laneous Buildings	10.00	110	8	1/1.5	6.0	1.21 1.22
						1.24 1.25
						1.27
				Total	107.0	1.29

Amendment

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Nine Mile Point Unit 2 FSAR

TABLE 12.4-12

OPERATIONAL MAN-REM PER YEAR FOR  
SELECTED BWR PLANTS

<u>Plant</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	
Dresden 1,2,3	1,662	3,423	1,680	1,693	1,529	1,800	2,105	2,802	2,923	1.18
Monticello	349	1,353	263	1,000	375	157	531	1,004	993	1.20
Nine Mile Point	824	681	428	1,383	314	1,497	591	1,592	1,264	1.22
Peach Bottom 2,3	-	228	840	2,036	1,317	1,388	2,302	2,506	1,977	1.24
Quad Cities 1,2	482	1,618	1,651	1,031	1,618	2,158	4,838	3,146	3,757	1.26
Vermont Yankee	216	153	411	258	339	1,170	1,138	731	205	1.28
Pilgrim 1	-	798	2,648	3,142	1,327	1,015	3,626	1,836	1,539	1.30
Millstone Point 1	1,430	2,022	1,194	392	1,239	1,793	2,158	1,496	929	1.32
Oyster Creek	984	1,140	1,078	1,614	1,279	467	1,733	917	865	1.34
Brunswick 1,2	-	-	-	-	1,004	2,602	3,870	2,638	3,792	1.36
Brown Ferry 1,2,3	-	-	-	-	1,792	1,667	1,825	2,380	2,220	1.38
Fitzpatrick	-	-	-	1,080	909	859	2,040	1,425	1,190	1.40
AVG. MAN-REM/UNIT	594	878	784	974	686	872	1,419	1,183	1,140	1.42
Overall avg. of 948 MAN-REM/yr UNIT										1.44
Reference: NUREG-0713, Volume 4										1.46

Amendment

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