REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8610160218 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: Submits response to comments on changes to FSAR Table 421.36-1 re Reg Guide 1.97 submitted in 860919 & 23 ltrs.

DISTRIBUTION CODE: B001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 6
TITLE: Licensing Submittal: PSAR/FSAR Amdts & Related Correspondence

NOTES:

	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL
	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	0
	ELD/HDS3		1	0	IE FILE		1	1
	IE/DEPER/EPB	36	1	1	IE/DQAVT/QAB	21	1	1
	NRR BWR ADTS		1	0	NRR PWR-B ADTS		1	0
	NRR ROE, M, L		1	1	NRR/DHFT/MTB		1	1
	REG FILE	04	1	1	RGN1		3	3
	RM/DDAMI/MIB		1	0				
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: LTTR 36 ENCL 31

[illegible] DIST [illegible]

[illegible] YES DOCKET #

[illegible] Nuclear [illegible] 05000[illegible]

[illegible] Corp

[illegible]

COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
[illegible]	[illegible]	BWR [illegible]	1 [illegible]
[illegible]	[illegible]	PWR [illegible]	1 [illegible]
[illegible]	[illegible]	[illegible]	1 [illegible]
[illegible]	[illegible]	PWR [illegible]	1 [illegible]
[illegible]	[illegible]	ADM [illegible]	[illegible]
[illegible]	[illegible]	IE [illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	NRR [illegible]	[illegible]
[illegible]	[illegible]	NRR [illegible]	[illegible]
[illegible]	[illegible]	RGN [illegible]	[illegible]
[illegible]	[illegible]	DMB [illegible]	[illegible]
[illegible]	[illegible]	NRC [illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

NIAGARA MOHAWK

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

NMP2L 0902
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

Niagara Mohawk forwarded changes to the Final Safety Analysis Report Table 421.36-1 related to Regulatory Guide 1.97 on September 19, 1986 (NMP2L 0882) and September 23, 1986 (NMP2L 0884). Your staff reviewed these changes and had comments. This letter responds to these comments.

Comments and responses are provided in the enclosure of this letter.

Very truly yours,

C. V. Mangan
Senior Vice President

LSL/pns
2127G
Enclosure

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

B001

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

Niagara Mohawk Power Corporation) Docket No. 50-410

(Nine Mile Point Unit 2))

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 V 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

CHRISTINE AUSTIN
Notary Public in the State of New York
Qualified in Onondaga Co. No. 4787687
My Commission Expires March 30, 19__

ENCLOSURE

Comment 1) Describe how the RHR Heat Exchanger outlet temperature can be measured by the use of alternate instruments which are qualified to Regulatory Guide 1.97. Also discuss the means of detection if the RHR Heat Exchanger is bypassed.

Response 1) Instruments 2RHS*TE13A, B measure RHR heat exchangers outlet temperature, which provides an indication of RHR system operation and its effectiveness in removing heat from the primary containment. These instruments are seismically qualified but are not environmentally qualified. These instruments perform no active safety function, thus do not need to be environmentally qualified. Other instruments, provided in accordance with Regulatory Guide 1.97, provide the operator with sufficient information to verify the RHR system is operating and effectively removing heat from the primary containment. These instruments are:

a. RHR system flow (2RHS*FT14A, B)
b. Cooling water flow to ESF components exchangers (2SWP*FT13A, B)
c. Drywell/suppression chamber pressure
d. Drywell atmosphere temperature
e. Suppression pool water temperature
f. Drywell spray header flow
g. Cooling water temperature to ESF components (service water supply temperature - 2SWP*TE31A, B).

Enclosed is a schematic diagram identifying the instrumentation about the RHR Heat Exchanger. Sufficient information regarding the RHR Heat Exchanger is known to verify performance and bypass. The flow indicator downstream of the heat exchanger verifies RHR flow from the heat exchanger. Valve position indicators verify heat exchanger bypass. A flow indicator in the service water system verifies cooling flow to the RHR Heat Exchanger. As indicated in FSAR Table 9.2-1A and 1B, the service water flow to each RHR Heat Exchanger is 7,400 gpm (total service water flow in each division is approximately 12,623 gpm). This information was submitted by our letter dated August 22, 1986 (NMP2L 0851).

It is therefore concluded that adequate indication of RHR system operation is provided without the instruments 2RHS*TE13A, B; thereby meeting the intent of Regulatory Guide 1.97, Rev. 3.

Comment 2) The low end of the intermediate range monitoring instrument was changed from 4 x 10^{-5} % to 4 x 10^{-4} % power. Describe how this change complies with the Regulatory Guide 1.97 requirement.

Response 2) Regulatory Guide 1.97 recommended monitoring neutron flux with the range of 10^{-6} % to 100 % full power. Enclosed is Final Safety Analysis Report Figure 7.6-2 which identifies neutron flux detection ranges of the neutron monitoring system. As indicated by this figure, the Regulatory Guide 1.97 recommended ranges are satisfied by the sum of neutron flux ranges from the source range monitor, intermediate range monitor, and power range monitor.

Comment 3) The Source Range Monitor (SRM) is not environmentally and seismically qualified. It is understood that the SRM will be environmentally qualified in the future as a marketable SRM is available. Describe the reason for not seismically qualified the SRM.

Response 3) Regulatory Guide 1.97 classifies as Type B those variables that provide information to indicate if plant safety functions are being accomplished. Type B, Category 1, is intended for key variables that directly indicated the accomplishment of a safety function and its importance to safety. Backup variables are generally Category 3. Neutron flux is the key variable for measuring reactivity control.

The degree to which this variable is important to safety is another consideration. The large number of detectors (i.e., source range monitors and intermediate range monitors) can be driven into the core soon after shutdown, making it highly probable that one or more of the existing Neutron Monitoring System (NMS) detectors will be inserted. There is little probability that there would be, simultaneously, a need for this measurement (in terms of operator action to be taken) and an accident environment in which the NMS would be rendered inoperable. Further, the operator can always actuate the Standby Liquid Control System upon loss of instrumentation, or it would be actuated automatically upon High Reactor Pressure of Low Reactor Water Level if the APRMS were not downscale.

The SRM provides neutron flux information during reactor startup and low flux level operations. The SRM is environmentally and seismically qualified to perform its scram trip function during fuel loading. The detector is seismically qualified, but the drive mechanism is not because the drive is not needed to perform the trip function.

Further, Supplement 4 of the Safety Evaluation Report indicated that a non-qualified SRM was acceptable on an interim basis. Niagara Mohawk has committed to a new SRM as described in our letter dated March 3, 1986 (NMP2L 0644).

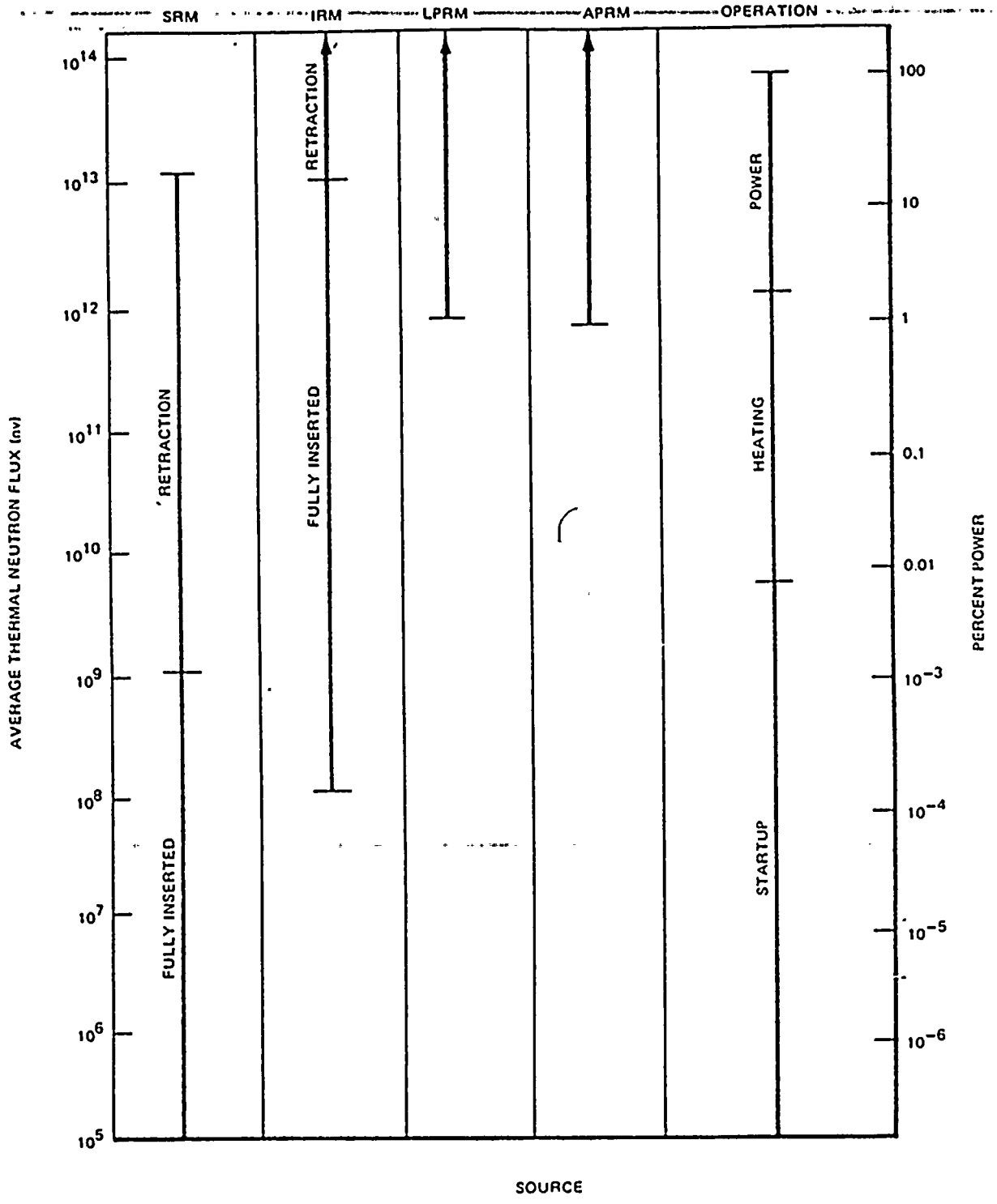
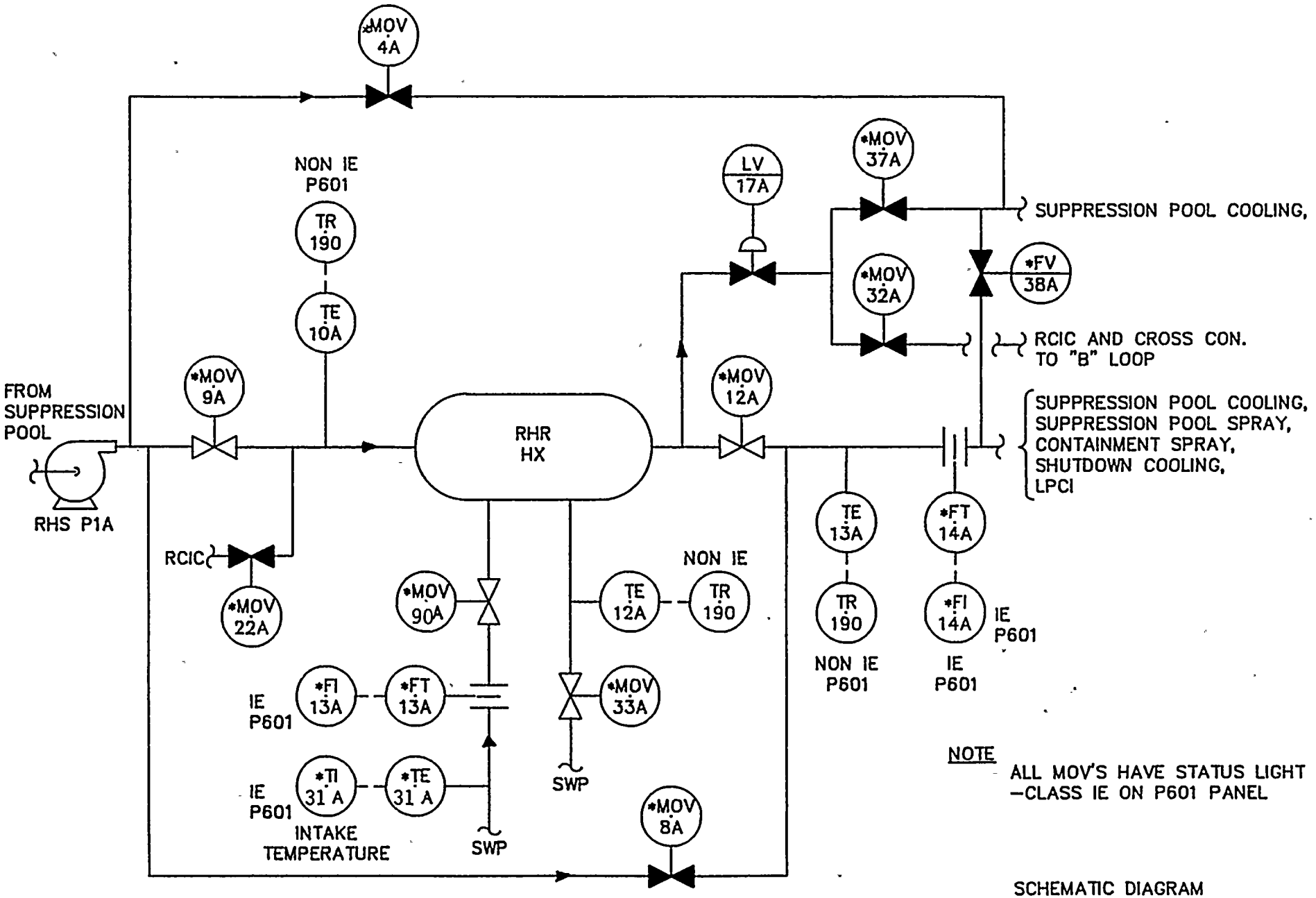


FIGURE 7.6-2

RANGES OF NEUTRON MONITORING SYSTEM

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT-UNIT 2
FINAL SAFETY ANALYSIS REPORT



NOTE

ALL MOV'S HAVE STATUS LIGHT —CLASS IE ON P601 PANEL

SCHEMATIC DIAGRAM OF RHR HEAT EXCHANGER AND INSTRUMENTATION