REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8312280386 DOC.DATE: 83/12/22 NOTARIZED: NO DOCKET #
FACIL:50-220 Nine Mile Point Nuclear Station, Unit 1, Niagara Powe 05000220
AUTH.NAME AUTHOR AFFILIATION
MANGAN,C.V. Niagara Mohawk Power Corp.
RECIP.NAME RECIPIENT AFFILIATION
VASSALLO,D.B. Operating Reactors Branch 2

SUBJECT: Requests extension of 10CFR50 App R III.G.3 installation date from 1984 refueling outage to next scheduled refueling outage,Tech Spec amend to remove high radiation automatic isolation feature of emergency condenser logic planned.

DISTRIBUTION CODE: A006S COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 5
TITLE: OR Submittal: Fire Protection

NOTES:

	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL
	NRR ORB2 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
	RGN1		1	1				
EXTERNAL:	ACRS	11	3	3	LPDR	03	1	1
	NRC PDR	02	1	1	NSIC	05	1	1
	NTIS		1	1				

TOTAL NUMBER OF COPIES REQUIRED: LTTR 21 ENCL 19

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8312280586 DOC.DATE: 83/12/22 NOTARIZED: NO DOCKET #
FACIL:50-220 Nine Mile Point Nuclear Station, Unit 1, Niagara Powe 05000220
AUTH.NAME AUTHOR AFFILIATION
LEMPGES,C.V. Niagara Mohawk Power Corp.
RECIP.NAME RECIPIENT AFFILIATION
VASSALLO,D.B. Operating Reactors Branch 2

SUBJECT: Requests extension of 10CFR50 App R III.G.3 installation date from 1984 refueling outage to next scheduled refueling outage.Tech Spec amend to remove high radiation automatic isolation feature of emergency condenser logic planned.

DISTRIBUTION CODE: A006S COPIES RECEIVED:LTR __ ENCL __ SIZE:__________
TITLE: OR Submittal: Fire Protection

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	NRR ORB2 BC 01	3	3			
INTERNAL:	ELD/HDS3	1	0	IE FILE 06	1	1
	IE/WHITNEY,L	1	1	NRR FIORAVANT07	2	2
	NRR WAMBACH	1	0	NRR/DL/LFB 09	2	2
	NRR/DL DIR	1	1	REG FILE 04	1	1
	RGN1	1	1			
EXTERNAL:	ACRS 11	3	3	LPDR 03	1	1
	FRL PDR 02	1	1	NSIC 05	1	1
	NTIS	1	1			

TOTAL NUMBER OF COPIES REQUIRED: LTTR 21 ENCL 19

NIAGARA MOHAWK

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

December 22, 1983

Director of Nuclear Reactor Regulation
Attention: Mr. Domenic B. Vassallo, Chief
Operating Reactors Branch No. 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. Vassallo:

Our October 1, 1982 and December 3, 1982 letters provided modifications that Niagara Mohawk planned to install to fulfill the requirements of 10CFR50 Appendix R III.G.3. One of these modifications dealt with the proposed removal of the emergency condenser high radiation isolation logic circuitry from the control complex. The high radiation isolation signal originates at the radiation monitors on the emergency condenser vents.

Subsequent to this proposed modification, Niagara Mohawk has adopted the Nuclear Regulatory Commission position of accepting manual isolation of the emergency condensers on a high radiation signal (Safety Evaluation Report Application of NUREG-0737, Item No. II.K.3.14, December 15, 1982). We are currently in the process of drafting a technical specification amendment to remove the present high radiation automatic isolation feature of the emergency condenser logic. Pending review of the proposed technical specification amendment by your staff, Niagara Mohawk requests an extension of the 10CFR50 Appendix R III.G.3 installation date for the above discussed modification from the 1984 refueling outage to the next scheduled refueling outage. Once the proposed technical specification amendment is approved, the modification will not be required. The exemption request and supporting information is attached.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

C. V. Mangan
Vice President
Nuclear Engineering and Licensing

CVM/JD:djm
Attachment

A006
1/1

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT UNIT 1
DOCKET NO. 50-220
DPR-63

10CFR50 Appendix R Exemption Request from the Schedular Requirements of 10CFR50.48(d)(3)

1. EXEMPTION REQUEST

Per the provisions of 10CFR50.48(c)(6) and 10CFR50.12, Niagara Mohawk Power Corporation requests an exemption from the specific requirements of Appendix R Section III.G.3, i.e. the schedular requirements of 10CFR50.48(d)(3). The specific modification this exemption request applies to is the proposed removal of the emergency condenser high radiation isolation logic circuitry from the control complex as indicated in our December 3, 1982 submittal. All other commitments remain the same.

This request is to prevent a potentially unnecessary modification, pending review of a technical specification amendment. The technical specification amendment reflects the documented Nuclear Regulatory Commission position (Safety Evaluation Report Application of NUREG-0737, Item No. II.K.3.14 - "Isolation of Isolation Condensers" to Operating Boiling Water Reactors of December 15, 1982) for manual isolation of the emergency condenser on high radiation.

The current control logic for the emergency condenser initiates isolation upon receiving a high radiation signal from the emergency condenser vent radiation monitors. The removal of the high radiation signal from the control complex was initially proposed as an Appendix R.III.G.3 modification for spurious operations. Subsequent to this proposal, Niagara Mohawk has adopted the Nuclear Regulatory Commission position of accepting manual isolation of the emergency condensers on a high radiation signal. Niagara Mohawk is currently in the process of requesting a technical specification amendment to remove the present high radiation isolation feature of the emergency condenser logic. Pending the review of the technical specification amendment, Niagara Mohawk requests an extension of the III.G.3 modification installation date from the 1984 refueling outage to the next scheduled refueling outage. This would avoid possible unnecessary costs in time and equipment, if the technical specification amendment is approved.

2. AREA DESCRIPTION

The control complex is made up of the auxiliary control room and the control room.

The auxiliary control room is located on elevation 261 feet approximately between columns 15 and 18 and A and B_A. The room is enclosed by three hour rated fire walls. The floor is three hour rated and the ceiling is non-rated. Three Class A rated fire doors are located between the auxiliary control room and the turbine building. A two hour rated enclosed stairway with a Class B rated fire door separates the auxiliary control room from the control room. Cables and pipes which penetrate the floor and walls are sealed with three hour rated seals. Cables and pipes which penetrate the ceiling are provided with fire stops. Separate smoke removal capability is provided for the auxiliary control room via a rated fire damper and an emergency exhaust fan.

The control room is located on elevation 277 feet approximately between columns 15 and 18 and A and B_A. The room is enclosed by three hour rated fire walls. The ceiling is three hour rated and the floor is non-rated. One Class A rated fire door is located between the control room and the administration building and another between the control room and the turbine building. A two hour rated enclosed stairway with a Class B rated fire door separates the control room from the auxiliary control room. Cables and pipes which penetrate the wall boundaries are sealed with three hour rated seals. Cables and pipes which penetrate the floor are provided with fire stops. The control room has 8,000 cubic feet per minute of exhaust ventilation capable of rapidly removing smoke and by-products.

3. SAFE SHUTDOWN EQUIPMENT

Safe shutdown systems are present in the control complex. The emergency condensers initiate and isolate automatically outside the control complex with the exception of the high steam flow and high radiation signals which may cause a spurious isolation of both emergency condenser loops in the event of a fire.

The high steam flow Appendix R III.G.3 confirmatory logic is scheduled for implementation during the 1984 refueling outage. The high radiation signals for the two emergency condenser loops enter the control complex from opposite sides and come together only at the radiation monitors located on "J" panel. The cables for the high radiation signals are run entirely in solid trays with covers in this area.

Control of the emergency condensers can be made totally independent of the control complex, including spurious operations, by the use of keylocked bypass switches located on the remote shutdown panels. The operation of the bypass switch removes the automatic isolation features from the emergency condenser's logic and provides for remote shutdown panel manual control. Vital reactor parameters, such as reactor vessel pressure, reactor vessel temperature and reactor coolant level also are displayed on the remote shutdown panels.

4. FIRE PROTECTION FEATURES

For the auxiliary control room, individual smoke detectors are installed in each relay cabinet. These detectors annunciate an alarm on the control room fire panel. Area cross-zoned smoke detection is provided, which actuates automatically a total flooding Halon 1301 system. As a backup to the Halon 1301 system, a total flooding manual CO_2 system is available. General fire suppression is provided by means of a remote hose station located at column B_A-17 in the adjacent fire zone D2A and portable fire extinguishers located within the room.

In the control room, the main control board and the general area are equipped with early warning smoke detectors. General fire suppression is provided by means of hose stations located in the adjacent fire zone A-1 and local portable fire extinguishers within the area.

5. FIRE HAZARDS ANALYSIS

The combustible loading for the auxiliary control room is due to cable insulation and panel board insulation. Fire hazards analysis estimate the fixed combustible loading at approximately 112,000 BTU/ft^2. This relates to a National Fire Protection Association standard maximum fire severity of less than 1.4 hours.

The combustible loading for the control room is due to cable insulation and panel board insulation. Fire hazards analysis estimate the fixed combustible loading at approximately 28,140 BTU/ft^2. This relates to a National Fire Protection Association standard maximum fire severity of less than 21 minutes.

The remaining source of combustible material within the control complex falls under the category of transient combustibles which are controlled by administrative procedures. Storage of same is not allowed during normal operations. The control complex is inspected weekly on the "Supervisor's Weekly Tour - N1-FP-1." Therefore, undetected accumulation of significant amounts of combustibles in this area is unlikely. Access to the control complex is limited to authorized personnel only, and the area is continuously manned.

6. CONCLUSION

Based on the above information, an exemption is requested from the schedular requirements of 10CFR50.48(d)(3). The technical bases which justify the exemption are summarized as follows:

1. Technical specification amendment which will remove need for this specific III.G.3 modification is currently being drafted.

2. Ionization smoke detectors are located in each control console and relay cabinet. Detectors are also provided for general area coverage.

3. The control complex is continually manned.

4. Access to the control complex is controlled.

5. Auxiliary control room is provided with an automatic total flood Halon 1301 system and a total flood manual CO_2 system as backup.

6. Manual suppression, hose stations and portable fire extinguishers available within and just outside the fire area is capable of complete area coverage.

7. Storage of transient combustibles is not allowed in the control complex during operation and is continually monitored.

8. The auxiliary control room and the control room have individual ventilation capability for rapid removal of smoke and by-products.

9. Remote shutdown panels are capable of operating the emergency condensers independent of the control complex. Once the keylocked bypass switches have been engaged opportunities for spurious isolation for both loops will be removed.

10. The cables which carry the emergency condenser vent high radiation signals are routed in solid trays with covers.

Based on the above information, this exemption request from the schedular requirements of 10CFR50.48(d)(3), as it applies to the above discussed modification, will not significantly decrease the margin of safety at Nine Mile Point Unit 1 nor will it jeopardize the health and safety of the public.