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DRL Reading
Branch Reading
ACRS (16)
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CRoberts, EPA

APR 14 1972

Docket No. 50-220

Niagara Mohawk Power Corporation
ATTN: Mr. F. J. Schneider
Vice President - Operations
300 Erie Boulevard West
Syracuse, New York 13202

Change No. 5
License No. DPR-17

Gentlemen:

Your letter dated April 5, 1972, requested a temporary waiver of Section 3.1.4(e) of the Technical Specifications of Facility Provisional Operating License No. DPR-17 for Nine Mile Point (NMP) Nuclear Station Unit 1. This change would permit draining of the torus for inspection while control rod drive maintenance is being performed. Section 3.3.7(e) of the Technical Specifications also would be waived to permit simultaneous draining of the torus and removal of the control rod drives for maintenance.

Technical Specifications 3.1.4(e) and 3.3.7(e) relating to the NMP core spray system and containment spray system, respectively, specify that if these systems become inoperable, the reactor shall be in the cold shutdown condition within ten hours and no work shall be performed on the reactor which could result in lowering the reactor vessel water level to more than seven feet eleven inches below minimum level. A failure of the control rod seal during removal of the drive mechanism could result in lowering of the reactor vessel water level. To minimize the possibility of such an unlikely event occurring you state that written procedures will be developed for performing this work prior to beginning the work. As a result of discussions with your staff, we understand that these procedures will specify that (1) no more than one control rod drive housing will be opened at any time, (2) a blind flange will be installed on the control rod drive housing whenever a control rod drive has been removed for maintenance, (3) work will not be performed in the reactor vessel while a control rod drive housing is open, (4) a control rod drive will not be removed if the backseat seal does not function, and (5) a minimum condensate storage volume of 300,000 gallons and a minimum hot well storage volume of 40,000 gallons will be maintained during the period that the torus water level is below that corresponding to minimum NPSH requirements.

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APR 14 1972

Based on these considerations and that the period of time involved in these concurrent maintenance tasks is limited, we have concluded that adequate provisions are taken to protect against draining of the reactor vessel while the torus is drained, and that the proposed action does not present significant hazards considerations not described or implicit in the Nine Mile Point Safety Analysis Report. There is reasonable assurance that the health and safety of the public will not be endangered. Accordingly, you are hereby authorized to perform the concurrent maintenance work requested in your letter dated April 5, 1972, in accordance with the provisions set forth above during the present shutdown. This waiver of Sections 3.1.4(e) and 3.3.7(e) of the Technical Specifications of Facility License No. DPR-17 shall terminate on May 13, 1972.

Please provide a report of the results of your inspection of the NMP torus. In addition, provide an analysis of the effects of possible blowdown forces on the torus baffles, other torus structural components, and blowdown vent pipe anchorages. This analysis should include consideration of those factors which caused the higher than expected blowdown forces at the Monticello plant. Describe a proposed course of action to avoid any safety problems if your analysis shows that acceptable structural design criteria are exceeded. If removal of the torus baffles at NMP is to be considered as a proposed course of action, sufficient analysis of such removal is required to show that the peak pressure during blowdown does not exceed the design pressure of the torus. This information should be provided with one signed original and 39 additional copies.

Please let us know within two weeks your schedule for submittal of the requested information.

Sincerely,

/s/

Donald J. Skovholt
Assistant Director for
Reactor Operations
Division of Reactor Licensing

4/14/72
Called P.A. Burt and gave info - and agreed to send one copy to Lear directly

cc: Arvin E. Upton, Esquire
LeBoeuf, Lamb, Leiby & MacRae
1821 Jefferson Place, N.W.
Washington, D. C. 20036

OFFICE ▶	DRL	DRL	DRL	DRL		
SURNAME ▶	CJDeBevec:sjh	RMDiggs	DLZiemann	DJSkovholt		
DATE ▶	4/14/72	4/14/72	4/14/72	4/14/72		

Form AEC-318 (Rev. 9-53) AECM 0240 ☆ U. S. GOVERNMENT PRINTING OFFICE: 1971—419—468

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

APR 14 1972

Docket No. 50-220

Files (Docket No. 50-220)
THRU: D. L. Ziemann, Chief, ORB #2, DRL
D.L. Ziemann
PROPOSED CHANGE NO. 5 TO DPR-17 (NINE MILE POINT - UNIT 1)

By letter dated April 5, 1972, Niagara Mohawk requested a temporary waiver of technical specification requirements to permit draining the torus during control rod drive maintenance. Additional information was provided by telephone discussions with T. Perkins, Assistant Station Superintendent, on April 11 and 12, 1972.

In response to our request to perform an inspection of the NMP torus, Niagara Mohawk proposed draining the torus for this inspection while concurrently performing control rod drive maintenance. For a short interval during and following rod drive removal, water leakage from the vessel through the penetration is prevented only by proper seating of the poison section assembly. Should a leak occur during this interval (estimated by Niagara Mohawk as a 20-minute period), makeup water would eventually be needed to prevent uncovering the core. Present specifications require that the emergency core cooling systems be operable whenever work is being performed which has the potential for draining the reactor vessel. Emergency core cooling systems involved are the core spray and containment spray systems [Specifications 3.1.4(e) and 3.3.7(e)]. With the torus drained, makeup water is available through Class I systems either from condensate storage through the core spray system or from the hot well through the feedwater system. The feedwater system, although of Class I seismic design, requires offsite power while the core spray system is supplied by onsite emergency power. We, therefore, conclude that adequate means are available to supply coolant to the reactor vessel in the unlikely event some coolant drains from the reactor vessel while performing control rod maintenance with the torus drained.

To minimize the period of time that a control rod housing is open, Niagara Mohawk will develop procedures whereby: (1) a blind flange will be installed on the control rod drive housing whenever a drive is removed for maintenance, (2) no more than one control rod drive housing will be opened at a time, (3) work will not be performed in the reactor vessel while the control rod drive housing is open, (4) a control rod drive will not be removed if the backseat seal does not function, and (5) minimum condensate storage volume will not be less than 300,000

gallons and minimum hot well storage volume will not be less than 40,000 gallons during the interval that the torus water level is below minimum NPSH requirements. This volume of water is sufficient to recover the torus water level to establish the operability of the emergency cooling systems.

Based on consideration of the limited interval of time involved in these concurrent maintenance tasks, the procedural controls to minimize the potential and duration of leakage from a control rod drive housing, and the available makeup coolant, we have concluded that adequate provisions are taken to protect against draining of the reactor vessel while the torus is drained. Therefore, we have concluded that the proposed waiver of Technical Specifications 3.1.4(e) and 3.3.7(e) does not present significant hazards considerations not described or implicit in the Safety Analysis Report and that there is reasonable assurance that the health and safety of the public will not be endangered.

C. J. DeBevec

C. J. DeBevec
Operating Reactors Branch #2
Division of Reactor Licensing

cc: D. J. Skovholt, DRL
T. J. Carter, DRL
D. L. Ziemann, DRL
C. J. DeBevec, DRL
R. M. Diggs, DRL
R. Engelken, CO (2)
M. Jinks, DR (2)