

UNITED STATES  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
NIAGARA MOHAWK POWER CORPORATION )  
(Nine Mile Point Nuclear Station Unit No. 1)

Docket No. 50-220

APPLICATION TO USE

AN

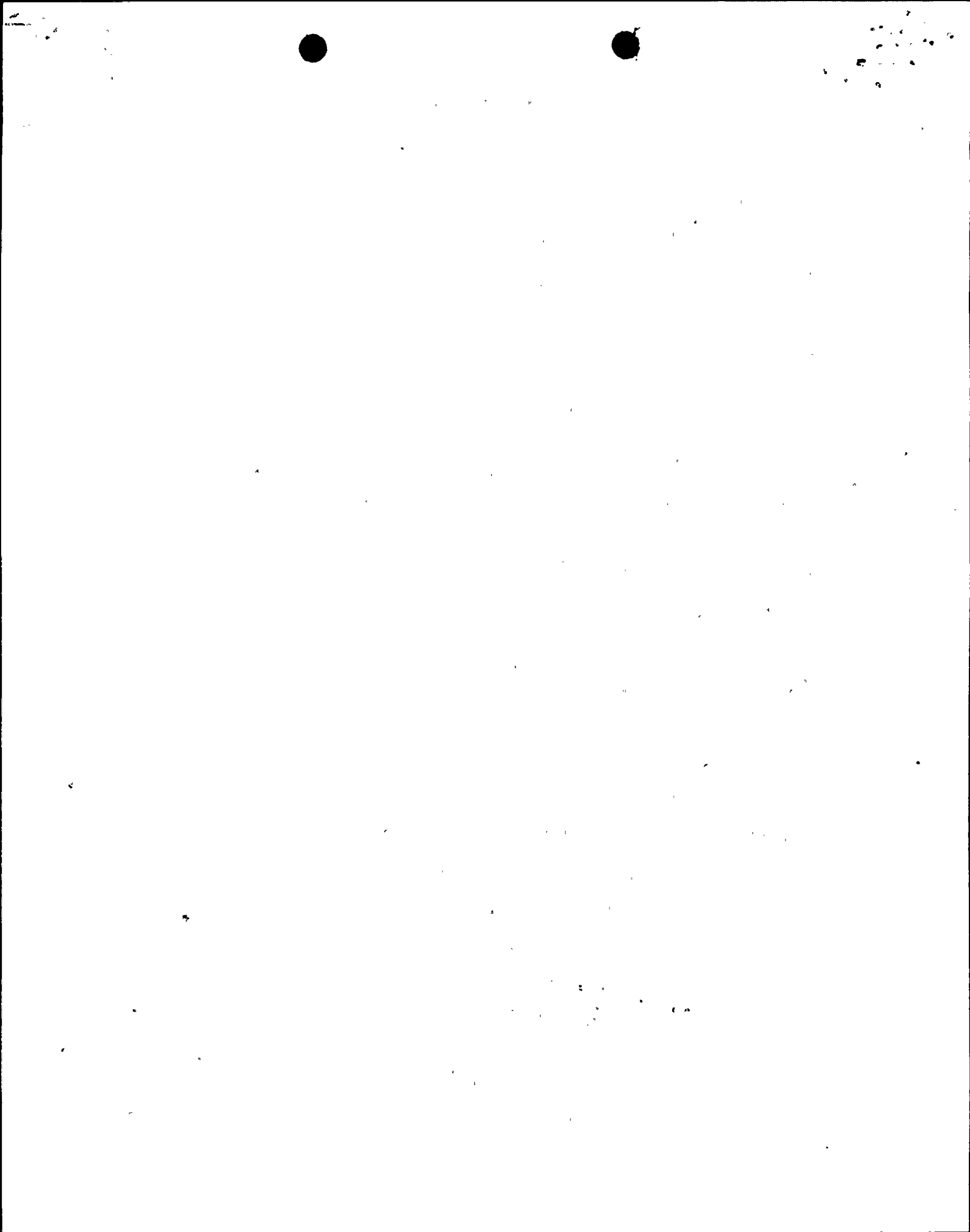
ALTERNATIVE TO THE REQUIREMENTS OF 10 CFR 50.55a

Pursuant to Section 50.55a(a)(3) of the Commission's Regulations (10 CFR 50.55a(a)(3), Niagara Mohawk Power Corporation, holder of an operating license for the Nine Mile Point Nuclear Station Unit 1 (Docket No. 50-220), hereby makes application for authorization to use an alternative to the requirements set forth in Section 50.55a(g)(4) of the Commission's Regulations.

Section 50.55a(a)(3) states that:

"Proposed alternatives to the requirements of paragraphs (c), (d), (e), (g) and (h) of this section or portion thereof may be used when authorized by the Director of the Office of Nuclear Reactor Regulation. The applicant must demonstrate that (i) the proposed alternatives would provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements of this section would result in hardship or unusual difficulties without a compensating increase in the level of quality and safety."

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Section 50.55a(g)(4) requires that throughout the service life of a nuclear power facility, components which are classified as ASME Code Class 1, 2 and 3 shall meet the requirements set forth in Section XI of the Code. Niagara Mohawk proposes to implement the following alternative to 10 CFR 50.55a(g)(4) which will provide an acceptable level of quality and safety: Perform an operational leak test in lieu of a hydrostatic pressure test after replacement of the Reactor Drain Valves.

Attachment A to this application demonstrates that the proposed alternative to Section 50.55a(g)(4) provides an acceptable level of quality and safety. Attachment A also demonstrates that compliance with 10 CFR 50.55a would, in this case, result in hardship and unusual difficulties without a compensating increase in the level of quality and safety.

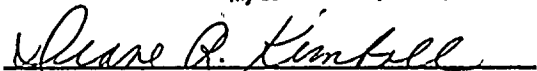
WHEREFORE, Applicant respectfully requests that the proposed alternative to the requirements of 10 CFR 50.55a(g)(4) be authorized by the Commission.

NIAGARA MOHAWK POWER CORPORATION

By   
Vice President  
Nuclear Engineering and Licensing

Subscribed and sworn to before me on this 18th day of January 1989.

DIANE R. KIMBALL  
Notary Public in the State of New York  
Qualified in Onondaga County No. 4833503  
My Commission Expires May 31, 1990

  
NOTARY PUBLIC

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## ATTACHMENT A

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

### Description of the Problem

During the current refueling and maintenance outage, Niagara Mohawk replaced two reactor drain valves, 37-08R and 37-09R. The valves are two-inch nominal diameter 1500 pound stainless steel angle globe valves with socket welded connections. The valves are part of the reactor coolant system pressure boundary.

ASME XI Code, subsection IWA-5214 requires a hydrostatic test after repairs or replacements. The hydrostatic test must be performed in accordance with subsection IWB-5222 which requires a hydrostatic test at a pressure above the nominal operating pressure.

### Justification

The replacement valves were designed and installed in accordance with the requirements of Section III, Subsection IWC, of the ASME Code, 1983 Edition, Summer '83 addenda. The socket welds will be 100% surface examined.

The reactor drain valves are located in a section of pipe which has no mechanical connection for the installation of a Hydrostatic Test Pump. The entire reactor system would have to be pressurized to hydrostatically test these valves. The reactor vessel is designed for a limited number of hydrostatic tests during the plant lifetime. These tests are normally performed at the end of the ten year Inservice Inspection Interval or after major maintenance. The reactor coolant pressure boundary was hydrostatically tested during the 1986 refueling outage.

Niagara Mohawk proposes to perform a system leakage test of these valves at nominal operating pressure in accordance with IWA-5211(c). A system leakage test will be performed at a nominal pressure of 1035 psig and 200°F per paragraphs IWA-5211(c) and IWB-5221(a) of ASME Section XI. We are proposing to use this test in lieu of a hydrostatic pressure test. This system leakage test, in combination with the nondestructive examinations performed, provides sufficient confidence of the integrity of the piping.

Accordingly, the proposed alternative provides an acceptable level of quality and safety. A reactor coolant system hydrostatic test for a minor modification constitutes a hardship without a compensatory increase in the level of quality and safety.

