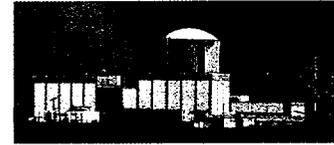




Kewaunee Nuclear Power Plant  
N490, State Highway 42  
Kewaunee, WI 54216-9511  
920-388-2560



Operated by  
Nuclear Management Company, LLC

November 1, 2000

10 CFR 50.55a

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington D.C. 20555

Gentlemen:

Docket 50-305  
Operating License DPR-43  
Kewaunee Nuclear Power Plant  
Relief Request for Inservice Testing

10 CFR 50.55a(f) requires that inservice testing (IST) be performed at the Kewaunee Nuclear Power Plant. The Nuclear Management Company (NMC) has determined that certain testing requirements result in undue hardship and therefore requests relief from the testing requirements.

In accordance with 10 CFR 50.55a(a)3, a description and basis for the relief requests as well as proposed alternate method of testing is included in the attachments to this letter. The first relief request is a clarification of Power Operated Relief Valve (PORV) block valve testing requirements. NMC has determined that Kewaunee Technical Specification 3.1.a.5.A and Table 4.1-3 allow for exemption from quarterly valve testing in the event that a PORV block valve is closed to isolate a leaking PORV. The second relief request is to classify 9 relief valves in the Component Cooling System as having a "thermal relief application" as defined in ASME OM Code 1998 Appendix I, and perform testing as specified in the referenced edition of the Code.

If you have any questions or comments, please contact me or Kevin Hujet of my staff.

Sincerely,

Kenneth H. Weinbauer  
Assistant Site Vice President

KPH

Attach.

cc - US NRC - Region III  
NRC Senior Resident Inspector

A047

ATTACHMENT 1

Letter from K. H. Weinbauer (NMC)

To

Document Control Desk (NRC)

Dated

November 1, 2000

PORV Block Valve Relief Request

Relief Request IST-RR-30

Components Affected

| <u>Valve #</u> | <u>Flow Diagram</u> |
|----------------|---------------------|
| PR-1A          | XK100-10            |
| PR-1B          | XK100-10            |

Code Requirement

Paragraph 4.2.1.1 of Part 10 of the Code requires that these valves be exercise tested nominally every three months, except as provided by paragraph 4.2.1.2.

Basis for Requesting Relief

These valves are located between the Pressurizer and the Pressurizer Power Operated Relief Valves (PORVs). The PORV block valves are normally open when the plant is at power. A scenario can be postulated which would require the PORV block valve(s) to be closed to isolate a leaking PORV. Current Kewaunee Technical Specifications, 3.1.a.5.A and Table 4.1-3, allow for this condition and provide an exemption from quarterly valve testing. The open safety function for the PORV block valves is to provide an alternate means of Reactor Coolant System (RCS) de-pressurization when responding to a steam generator tube rupture event. The closed safety function of the PORV block valves is to maintain RCS inventory.

NUREG-1316 documents the NRC Staff position that stroke testing of the PORVs should not be performed during power operation. The staff concluded that stroke testing during power operation, in the words of the ASME Code, was not practical (reference ASME Section XI, Paragraph IWV-3412) because of the potential for a PORV to stick open during the stroke test. Testing the PORV Block valve(s) when a PORV is leaking would result in RCS leakage, and a potential to lose isolation capability if the valve(s) failed to close. Therefore, testing of the PORV Block Valves with an associated leaking PORV, should also be considered not practicable. Testing under these conditions would be deferred as allowed by paragraph 4.2.1.2 of the Code.

Additionally, based on previous regulatory actions for the Kewaunee Nuclear Power Plant, with respect to NUREG-0578, NUREG-1316, Generic Issue 70 and Generic Letter 90-06, it can be inferred that exemption from Inservice Testing exercise requirements exist if the valve(s) is closed to isolate a leaking PORV. Valve operability in this situation, is ensured by maintaining power available to the valve(s) and the valve(s) inclusion in the Generic Letter 89-10 MOV Test program.

Alternate Method of Testing

Continue testing valve(s) on a nominal three-month frequency as required by the Code. If plant conditions require the valve(s) to be closed to isolate a leaking PORV, as defined by technical specifications, defer testing until the next plant shutdown. This testing will be performed prior to achieving hot standby on the subsequent plant start up. Valve testing could then be performed in conjunction with PORV testing.

ATTACHMENT 2

Letter from K. H. Weinbauer (NMC)

To

Document Control Desk (NRC)

Dated

November 1, 2000

Thermal Relief Device Relief Request

Relief Request IST-RR-31

Components Affected

| <u>Valve #</u> | <u>Flow Diagram</u> |
|----------------|---------------------|
| CC-201         | X-K100-19           |
| CC-301         | X-K100-19           |
| CC-401A        | X-K100-19           |
| CC-401B        | X-K100-19           |
| CC-501         | X-K100-20           |
| CC-803         | X-K100-20           |
| CC-907         | X-K100-20           |
| CC-1003A       | X-K100-20           |
| CC-1003B       | X-K100-20           |

Code Requirement

Section 1.3.4 of Part 1 of the Code requires that 20% of the valves of each type and manufacture be tested within any 48 months. This 20% shall be previously untested valves if they exist.

Basis for Requesting Relief

OM Code 1998 Appendix I defines thermal relief application as “a relief device whose only overpressure protection function is to protect isolated components, systems, or portions of systems from fluid expansion caused by changes in fluid temperature”. These 9 Code Class 3 valves can be classified as thermal reliefs in that they are installed on heat exchangers and discharge to the downstream side of the heat exchanger isolation valves. Therefore, they do not provide any system overpressure protection and only protect the heat exchanger when the isolation valves are closed. Additionally, these valves are located in the Component Cooling system such that removal for testing requires a complete system shutdown. This, in turn, requires a full core off load. Therefore, based on the current 18 month refueling outage frequency, a full core off load would be required every other outage to meet the 20% tested within any 48 month requirement.

Alternate Method of Testing

In accordance with ASME OM Code 1998 Appendix I, paragraph I-1390, and Code Case OMN-2, “Thermal Relief Valve Code Case, OM Code-1995, Appendix I”, these valves will be tested or replaced once every ten years, unless performance data indicates more frequent testing or replacement is necessary.