WOLF CREEK
NUCLEAR OPERATING CORPORATION

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WO 96-0035

U. S. Nuclear Regulatory Commission
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Reference: Letter WO 96-0014, dated February 2, 1996, from O. L. Maynard, WCNOC, to USNRC
Subject: Docket No. 50-482: Clarification of Request for Relief From ASME Section XI Hydrostatic Testing of Class 1 and Class 2 Pressure Boundaries

Gentlemen:

This letter provides clarification to the request for relief from ASME Section XI Hydrostatic Testing of Class 1 and Class 2 Pressure Boundaries requested by the Reference. Alternative 2, which is described in the Attachment to the Reference, is superseded by the Attachment to this letter. A new Alternative 3 is also provided in the Attachment. This information is provided based on a February 12, 1996, telephone conference call with Mr. Jim Stone and Mr. John Wong of the Nuclear Regulatory Commission Staff.

If you have any questions concerning this matter, please contact me at (316) 364-8831, extension 4450, or Mr. Richard D. Flannigan, at extension 4500.

Very truly yours,

Otto L. Maynard

OLM/jra

Attachment

cc: L. J. Callan (NRC), w/a
W. D. Johnson (NRC), w/a
J. F. Ringwald (NRC), w/a
J. C. Stone (NRC), w/a

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CLARIFICATION OF INSERVICE INSPECTION RELIEF REQUEST

Alternative 2, as described in the Attachment to Letter WO 96-0014, dated February 2, 1996, from O. L. Maynard, WCNOC to USNRC (Reference), is superseded by the following new Alternative 2. An additional alternative is added as Alternative 3.

Alternative 2) Reactor Coolant System (RCS) Cold Leg Safety Injection

Alternative 2 covers the Class 1 and Class 2 pressure boundaries between the RCS pressure isolation check valves on the four RCS Cold Leg Safety Injection lines. These boundaries include a portion of the Residual Heat Removal, Safety Injection and Accumulator Safety Injection lines. Alternative 2 is similar to Alternative 1, except that the pressure verified in January, 1996 for one of the four lines was measured at 610 psig. The pressure on one other line was unable to be measured because the test location was inside the bioshield and therefore was inaccessible during power operation. Each Accumulator tank is connected to the RCS boundary upstream of the second RCS pressure isolation check valve. Although these locations were initially pressurized to the RCS operating pressure of 2235 psig during RCS pressure isolation valve leakage testing, acceptable leakage through the valves can cause the pressure between the two check valves to decrease. Because of Accumulator high/low pressure alarms of 648/601 psig and the presence of the Accumulator pressure isolation check valve, it is assured that the pressure between each Accumulator pressure isolation check valve and the first RCS pressure isolation check valve will be maintained greater than 600 psig (i.e., greater than or equal to the Accumulator pressure). Similar to Alternative 1 of the Reference, WCNOC proposes to use the Generic Letter 88-05 boric acid monitoring program inspection to verify the absence of pressure boundary leakage while subjected to the greater than 600 psig pressure applied for the 14 months of operation since the last refueling. However, due to the lower pressure applied, WCNOC further proposes to supplement the Generic Letter 88-05 monitoring program inspection with a flow test. During RCS pressure isolation valve leakage testing, following a pressurization hold time of 10 minutes, the amount of water used as the pressure source and the identified valve leakage can be measured and compared. If a discrepancy is identified between the measurements, it will be evaluated taking into consideration the impact from other sources of leakage and equipment inaccuracies. This flow test supplementing the boric acid monitoring program inspections will adequately confirm that no pressure boundary leakage is present in the subject locations.

For the two RCS Cold Leg Safety Injection lines addressed in Alternative 2, WCNOC requests relief from the First 10-year Inservice Inspection Interval Section XI requirements for performing the 10-year system hydrostatic testing. Relief is requested on the basis that the combined boric acid monitoring program inspections implemented as a result of Generic Letter 88-05 and the comparison of the pressure source and leakage measurements, provide an alternative which provides an acceptable level of quality and safety. The implementation of a separate test to apply ASME Section XI 10-year system hydrostatic test pressure and hold time requirements to these pressure boundary locations would result in a hardship to WCNOC in the form of additional testing,

financial burden and additional dose to personnel without a compensating increase in quality and safety.

Alternative 3) RCS Cold Leg High Pressure Safety Injection

During the January, 1996 pressure measurements of the subject pressure boundaries discussed in Alternative 1 in the Reference, the RCS cold leg high pressure safety injection lines (4 loops with a common supply) had insignificant pressure values. Although these locations were initially pressurized to the RCS operating pressure of 2235 psig during valve leakage testing, acceptable leakage through boundary valves can cause the pressure between the two RCS pressure isolation check valves to decrease with time. It is probable that any pressure boundary leakage will still be identified by the boric acid monitoring program inspections. However, since the length of time at an adequate pressure can not be determined, performing an additional test at 1700 psig for a duration of 4 hours is proposed. During RCS pressure isolation valve leakage testing, the boundary between the two check valves is pressurized. Although the test does not hold the pressure for longer than needed to stabilize the leakage flow measurement, it is proposed that the test be modified to hold the pressure for 4 hours while RCS pressure is increased. This can be done without an impact on outage critical path time. Performing the test at 1700 psig allows the testing to be sequenced with other RCS pressure isolation valve testing that normally occurs with RCS pressure at 1800 psig and minimizes the impact on normal critical path plant startup activities. As noted in Alternative 1 in the Reference, the test pressure between RCS pressure isolation check valves must be maintained below the RCS pressure to preclude flow through the first check valve. Following the 4 hour hold time, the Code required VT-2 examination will be performed while the test boundary is held at the 1700 psig. Testing at 1700 psig is adequate to identify any pressure boundary leakage and can be performed without undue hardship.

For the RCS cold leg high pressure safety injection lines, relief is requested from the First 10-year Inservice Inspection Interval Section XI requirements for performing the 10-year system hydrostatic testing. Relief is requested on the basis that the test at 1700 psig held for 4 hours provides an alternative which provides an acceptable level of quality and safety. The implementation of a separate test to apply ASME Section XI 10-year hydrostatic test pressure and hold time requirements to these pressure boundary locations would result in a hardship to WCNOC in the form of additional testing and financial burden.