



Carolina Power & Light Company

Harris Nuclear Plant
PO Box 165
New Hill NC 27562

SERIAL: HNP-00-174
10 CFR 50.55a

DEC 5 2000

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
INSERVICE INSPECTION PROGRAM RELIEF REQUEST NO. CC-VR3
ALTERNATIVE TO ASME CODE SECTION XI, IWV-1100, PART 10 OF THE ASME
OPERATIONS AND MAINTENANCE (OM) STANDARDS (OMa-1988 EDITION).

Dear Sir or Madam:

In accordance with 10 CFR 50.55a(a)(3)(ii), Carolina Power & Light Company (CP&L) requests a one-time relief for the Harris Nuclear Plant (HNP) from the 1989 Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section XI, IWV-1100, Part 10 of the ASME Operations and Maintenance (OM) Standards (OMa-1988 edition), as discussed in NRC Staff Position 2 in Attachment 1 of USNRC Generic Letter 89-04, Guidance on Developing Acceptable Inservice Testing Programs. Specifically, relief is requested from HNP's commitment to disassemble at least one check valve of a specific group during RFO10.

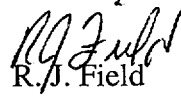
Relief is requested from performing disassembly of Component Cooling Water (CCW) check valves during RFO10 as specified in Relief Request #CC-VR2, approved by the NRC by letter dated February 1, 1999. The subject three check valves are located inside primary containment in the CCW supply lines to the individual Reactor Coolant Pump (RCP) thermal barrier heat exchangers. Check valve ICC-216, which is scheduled for disassembly and inspection during the upcoming RFO10, was disassembled during RFO9 with satisfactory inspection results. CP&L requests not to perform the disassembly of ICC-216 during RFO10 and will resume the disassembly plan in accordance with Relief Request #CC-VR2 which will require the disassembly of ICC-216 again in RFO11.

An alternative to the disassembly requirement is proposed in the enclosed Relief Request #CC-VR3. A Steam Generator Replacement Project is scheduled for RFO10. These valves are located in the same area as the Steam Generators. Valve disassembly would pose workers to additional hazards both in the industrial safety and radiological areas while also creating schedule hardships without a compensating increase in the level of quality and safety. For this reason, CP&L requests a one-time relief from any check valve disassemblies for this specific check valve group.

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Please refer any question regarding this submittal to Mr. E. McCartney at (919) 362-2661.

Sincerely,

A handwritten signature in dark ink, appearing to read "R.J. Field".

R.J. Field
Manager, Regulatory Affairs

MGW

Enclosure

c: Mr. J. B. Brady (NRC Senior Resident Inspector, HNP)
Mr. Rich Laufer (NRR Project Manager, HNP)
Mr. L. A. Reyes (NRC Regional Administrator, Region II)

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COMPONENT(S) FOR WHICH RELIEF IS REQUESTED:

Component Cooling Water Reactor Coolant Pump Thermal Barrier Heat Exchangers Check Valves: 1CC-216, 1CC-227, & 1CC-238

CODE REQUIREMENT(S):

Harris Nuclear Plant (HNP) is committed to implement it's IST program in accordance with the 1989 Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI. The 1989 Edition of ASME Section XI, IWV-1100 requires valve testing be performed in accordance with the requirements stated in ASME/ANSI OM (Part 10).

ASME/ANSI OM (Part 10)

Paragraph 4.3.2.2 'Exercising Requirements' states that valves shall be exercised as follows:

- (a) During plant operation, each check valve shall be exercised or examined in a manner which verifies obturator travel to the closed, full-open or partially open position required to fulfill its function.
- (b) If full-stroke exercising during plant operations is not practicable it may be limited to part-stroke during plant operation and full-stroke during cold shutdowns.
- (c) If exercising is not practicable during plant operation, it may be limited to full-stroke exercising during cold shutdowns.
- (d) If exercising is not practicable during plant operation and full-stroke during cold shutdowns is also not practicable, it may be limited to part-stroke during cold shutdowns, and full-stroke during refueling outages.
- (e) If exercising is not practicable during plant operation or cold shutdowns, it may be limited to full-stroke during refueling outages.
- (f) Valves full-stroke exercised at shutdowns shall be exercised during each shutdown, except as specified in (g) below. Such exercise is not required if the time period since the previous full-stroke exercise is less than 3 months.
- (g) Valve exercising shall commence within 48 hr of achieving cold shutdown, and continue until all testing is complete or the plant is ready to return to power. For extended outages, testing need not be commenced in 48 hr provided all valves required to be tested during cold shutdown will be tested prior to plant startup. However, it is not the intent of this Part to keep the plant in cold shutdown in order to complete cold shutdown testing.
- (h) All valve testing required to be performed during a refueling outage shall be completed prior to returning the plant to operation.

Paragraph 4.3.2.4 'Valve Obturator Movement' states:

- (a) The necessary valve obturator movement shall be demonstrated by exercising the valve and observing that either the obturator travels to the seat on cessation or reversal of flow, or opens to position required to fulfill its intended function. Observation may be by observing a direct indicator such as a position indicating device, or by other indicator(s) such as changes in system pressure, flow rate, level, temperature, seat leakage testing, or other positive means.
- (b) If a manual mechanical exerciser is used to move the obturator, the force or torque required to initiate movement (breakaway) shall be measured and recorded. The breakaway force shall not vary by more than 50% from the established reference value. The reference value used shall be the value obtained when the valve is known to be operating properly and shall be taken under conditions as close as practicable to the conditions under which the valve will be tested, e.g., wet vs. dry, equivalent static head, etc.
- (c) As an alternative to the testing in (a) or (b) above, disassembly every refueling outage to verify operability of check valves may be used.

USNRC Generic Letter 89-04, Guidance on Developing Acceptable Inservice Testing Programs, Attachment 1, Staff Position 2, Alternative to Full Flow Testing of Check Valves states:

The NRC staff position is that valve disassembly and inspection can be used as a positive means of determining that a valve's disk will full-stroke exercise open or of verifying closure capability, as permitted by IWV-3522. If possible, partial valve stroking quarterly or during cold shutdowns, or after reassembly must be performed.

CODE REQUIREMENT FROM WHICH RELIEF IS REQUESTED:

Relief is requested from ASME/ANSI OM (part 10) Paragraph 4.3.2.4.(c): As an alternative to testing, disassembly every refueling outage to verify operability of check valves may be used.

Valve ICC-216 is scheduled for disassembly in RFO10. Relief is requested to not perform disassembly of any of the three valves in this specific group during RFO10.

Harris currently has the approved Relief Request #CC-VR2 to use sample disassembly as described in GL 89-04 on the subject valves. This request (#CC-VR3) is for RFO10 only, and HNP would return to the sample plan described in Relief Request #CC-VR2 following RFO10.

An alternative disassembly plan is proposed.

BASIS FOR REQUESTING RELIEF:

HNP IST Program Plan HNP-IST-002 – 2nd Interval groups three check valves ICC-216, ICC-227, and ICC-238 into a sample disassembly group as required by Relief Request #CC-VR2. These valves are located inside primary containment in the Component Cooling Water (CCW) supply lines to the individual Reactor Coolant Pump (RCP) thermal barrier heat exchangers. A Steam Generator Replacement Project is scheduled for RFO10. These valves are

located in the same area as the steam generators. These valves are not provided with external position indication.

Due to the steam generator replacement, valve disassembly would pose workers to additional hazards both in the industrial safety and radiological areas while also creating schedule hardships without a compensating increase in the level of quality and safety. For this reason, CP&L requests a one-time relief for any check valve disassemblies for this specific check valve group.

During RFO9, two of the three valves (1CC-216 & 1CC-238) in the group were disassembled which is one additional valve disassembly above that required by Relief Request #CC-VR2.

CP&L will resume the disassembly plan as specified in Relief Request #CC-VR2 with a disassembly of 1CC-216 & 1CC-227 in RFO11. Please note that the disassembly of 1CC-216 in RFO11 will reset the six-year clock to prevent violation of the maximum six-year disassembly requirement.

ALTERNATIVE SCHEDULE:

A summary of the revised check valve disassembly schedule reflecting the proposed relief request (RR) is as follows:

Valve #	Group RR#	RFO8 10/98	RFO9 03/00	RFO10 09/01	RFO11 03/03	RFO12 09/04	RFO13 03/06	RFO14 09/07
1CC-216	CC-VR2		X	RR	X		X	
1CC-227		X			X			X
1CC-238			X			X		