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Exelon Nuclear

April 20, 2001

10 CFR 50.55a

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Subject: Submittal of Relief Requests RV-05 to the Requirements of ASME/ANSI Operation and Maintenance of Nuclear Plants, OM-1987 Part 1, Section 1.3.4.3(a), "Test Requirements (Containment Relief Valves)"

In accordance with 10 CFR 50.55a(a)(3)(i), Exelon Generation Company (EGC), LLC, requests approval of Relief Request RV-05 for use at LaSalle County Station, Unit 1 and Unit 2. The basis of the relief request is that the proposed alternative would provide an acceptable level of quality and safety. Relief Request RV-05 proposes to change the containment relief valve setpoint test frequency to 24 months to be consistent with that specified in LaSalle County Station, Unit 1 and Unit 2, Technical Specifications (TS) Surveillance Requirement (SR) 3.6.1.6.3.

It is requested that the proposed alternative be approved by October 17, 2001 to support LaSalle County Station TS SR testing.

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Should you have any questions concerning this letter, please contact Mr. William Riffer, Regulatory Assurance Manager, at (815) 357-6761, extension 2383.

Respectfully,

Charles G. Pardee
Site Vice President
LaSalle County Station

Attachment

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - LaSalle County Station

ATTACHMENT

VALVE RELIEF REQUEST RV-05

Valve Relief Request RV-05
Revision 2

COMPONENT IDENTIFICATION

Code Class:	Class 2
Reference:	ASME/ANSI Operation and Maintenance of Nuclear Power Plants, OM-1987, Part 1
Examination Category:	A and C
Description:	The purpose of the relief request is to set the frequency requirement of the valve setpoint tests to that specified in the LaSalle County Station Technical Specifications.
Component Numbers:	1(2)PC001A Suppression Chamber- Drywell Vacuum Breaker 1(2)PC001B Suppression Chamber- Drywell Vacuum Breaker 1(2)PC001C Suppression Chamber- Drywell Vacuum Breaker 1(2)PC001D Suppression Chamber- Drywell Vacuum Breaker

Code Requirement

ASME/ANSI Operation and Maintenance of Nuclear Power Plants, OM-1987, Part 1 (OM-1), Section 1.3.4.3(a), "Test Requirement (Containment Relief Valves)," requires that within every 6 month period, operability tests including valve setpoint tests, shall be performed unless historical data indicates the need for more frequent testing.

Basis for Relief

Pursuant to 10 CFR 50.55a(a)(3)(i), relief is requested from the provision of OM-1, Section 1.3.4.3(a), that requires valve setpoint tests to be conducted every 6 months. The basis of the relief request is that the proposed alternative would provide an acceptable level of quality and safety.

The primary containment ensures that the release of radioactive materials will be restricted to those paths and associated leak rates assumed in the accident analyses. This restriction in conjunction with the leakage limitation, will limit the site boundary radiation dose to a small fraction of the limits of 10CFR100, "Reactor Site Criteria," during accident conditions. The primary containment walls have a steel liner, which acts as a low leakage barrier.

The primary containment structure consists of a drywell and a suppression chamber. The primary function of the drywell is to contain the effects of a design-basis recirculation line break and direct the steam released from a pipe break into the water pool of the suppression chamber. The drywell contains a floor that serves as a pressure barrier between the drywell and suppression chamber, and as a support structure for the reactor pedestal. The primary function of the suppression chamber is to provide a reservoir of water capable of condensing the steam flow from the drywell and collecting the non-condensable gases in the suppression chamber air space.

Vacuum relief valves are provided between the drywell and suppression chamber to prevent exceeding the drywell floor negative design pressure and backflooding of the suppression chamber pool water into the drywell. The vacuum relief valves are designed to equalize the pressure between the drywell and suppression chamber air space so that the reverse pressure differential across the drywell floor will not exceed the design value of five pounds per square inch. This is needed to maintain the structural integrity of the primary containment under conditions of large differential pressures. Therefore, the subject relief valves are considered containment relief valves and are subject to the testing requirements outlined in OM-1, Section 1.3.4.3(a), for Class 2 and 3 containment vacuum relief valves.

The vacuum relief valves (four assemblies) are outside the primary containment and form an extension of the primary containment boundary. The vacuum relief valves are mounted in special piping which connects the drywell and suppression chamber. In each vacuum breaker assembly, there are two manually operated butterfly valves, one on each side of the vacuum breaker, which are provided as system isolation valves should failure of the vacuum breaker occur and as isolation valves for testing. The vacuum relief valves are instrumented with redundant position indication in the main control room. The valves are provided with the capability for local manual testing.

In accordance with the requirements of LaSalle County Station, Unit 1 and Unit 2, Technical Specifications (TS) Surveillance Requirement (SR) 3.6.1.6.1 and SR 3.6.1.6.2, each vacuum breaker is verified to be closed at least once per 14 days, and full-stroke exercised at least once per 92 days and within 12 hours after discharge of steam to the suppression chamber from the safety-relief valves. Additionally, LaSalle County Station Technical Requirements Manual (TRM), Section 3.6.b.1 requires both of the position indicators for each valve to be verified operable at least once per 92 days. In addition to the above, TS SR 3.6.1.6.3 requires measurement of the force to open each vacuum breaker from the closed position. Technical Specification SR 3.6.1.1.3 also measures vacuum breaker bypass leakage at least once per 24 months.

The 6 month operability tests identified in OM-1, Section 1.3.4.3(a), refer to the open and close capability (i.e., exercise) tests, and valve setpoint tests. A comparison of the LaSalle County Station TS SRs and OM-1 test requirements for the subject valves indicates that the testing frequencies identified in the TS SRs are more limiting except for the performance of the valve setpoint tests.

There are two primary methods to conduct a valve setpoint test for this type of vacuum breaker, manual exercising while measuring breakaway torque or a valve setpoint test using pressurized air. As stated above, the subject valves are provided with the capability for local manual testing. However, this manual testing method was determined to be impractical because of the inconsistencies in the test data identified during preoperational testing. The NRC identified this test method as an open item (373/81-28-07). Resolution of this issue included a commitment to perform this testing using pressurized air.

Previously, LaSalle County Station obtained relief to perform the testing every 18 months as prescribed by Technical Specifications (Relief RV-05, Revision 1, July 1998). The bases for the previous relief was the determination that it was impractical to verify vacuum breaker valve setpoint using pressurized air every 6 months during plant operation. Verifying vacuum breaker setpoints requires the closure of the two manually operated butterfly valves upstream and downstream of the subject valves, the hook up of air supply hoses, pressurization of a large volume of piping, and blowdown of air inventory into the nitrogen inerted drywell. Since the two manually operated butterfly valves must be closed to perform this test, a TS Action Statement must be entered for the sole purpose of performing this test.

A review of the maintenance history of the subject valves tested at the previous 18 month TS frequency indicates that 29 tests were conducted with only one failure. The failure was related to the valve position indicator and did not prevent the valve from performing its safety function. Additionally, the current 24 month Technical Specification setpoint test frequency is consistent with the two year test frequency outlined in Section I 1.3.7 of mandatory Appendix I of the 1995 Edition of the ASME OM Code.

Alternative Test

The requested change will allow LaSalle to conduct valve setpoint tests on these valves in accordance with the 24 month setpoint test frequency identified in LaSalle County Station TS SR 3.6.1.6.3.

Applicable Time Period

This alternative is requested for the remaining duration of the second and third inspection periods for LaSalle County Station, Unit 1 and Unit 2.