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June 14, 2002

10 CFR 50.55a(a)(3)

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: Request to Implement the 1995 Edition and 1996 Addenda of the American Society of Mechanical Engineers Code for Operation and Maintenance of Nuclear Power Plants

This report is submitted in accordance with 10 CFR 50.55a(a)(3). Exelon Generation Company (EGC), LLC, requests approval of proposed Relief Request RV-14 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-14 seeks approval to implement the American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI), Operation and Maintenance of Nuclear Power Plants, OMa-1996, Subsection Inservice Testing Code (ISTC), as it applies to motor operated valves, including the Code Case OMN-1, "Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants."

We request that the proposed relief request be approved by December 14, 2002.

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Should you have any questions concerning this letter, please contact
Mr. Glen T. Kaegi, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "George P. Barnes". The signature is fluid and cursive, with a large initial "G" and "B".

George P. Barnes
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-14

Valve Relief Request - RV-14
(Rev. 0)

COMPONENT IDENTIFICATION

Code Class: Class 1, 2, and 3

Reference: American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI), Operation and Maintenance of Nuclear Power Plants, OMa-1988, Part 10 (OM-10).

Examination Category: A and B

Description: OM-10 requires the periodic testing of motor operated valves (MOV's)

Affected Components: All MOV's in the LaSalle County Station Inservice Testing Program

CODE REQUIREMENTS

American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI), Operation and Maintenance of Nuclear Power Plants, OMa-1988, Part 10 (OM-10), requires periodic testing of motor operated valves (MOV's).

CODE REQUIREMENT FROM WHICH RELIEF IS REQUESTED

In lieu of the ASME OMa-1988 Part 10 MOV testing requirements utilized in the LaSalle County Station Inservice Testing (IST) Program, relief is requested to use the MOV testing requirements of the ASME OMa-1996, Subsection Inservice Testing Code (ISTC), and Code Case OMN-1, "Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light Water Reactor Power Plants".

BASIS FOR RELIEF

Pursuant to 10 CFR 50.55a(a)(3), relief is requested to use the MOV testing requirements of the ASME OMa-1996, Subsection ISTC, including Code Case OMN-1, for stroke time testing and position indication testing of MOV's in the IST Program. The basis of the relief request is that the proposed alternative would provide an acceptable level of quality and safety.

The Nuclear Regulatory Commission (NRC) in a September 22, 1999 Federal Register Notice (64 FR 51370), issued a Final Rule on 10 CFR Part 50, "Industry Codes and Standards; Amended Requirements." The Federal Register Notice revised, in part, the IST requirements for MOV's. In the final rule, the NRC amended its regulations to incorporate by reference the 1995 Edition and 1996 Addenda of the ASME Code for Operation and Maintenance of Nuclear Power Plants. The final rule also permits the use of alternate rules for IST of MOV's as described in ASME Code Case OMN-1 in lieu of certain provisions of Subsection ISTC. The final rule publication noted that the NRC will favorably consider a request by a licensee to apply Code Case OMN-1 for MOV's provided the following commitments are met.

1. The adequacy of the diagnostic test interval for each valve must be evaluated and adjusted as necessary but not later than 5 years or three refueling outages (whichever is longer) from initial implementation of ASME Code Case OMN-1.
2. When extending the exercise test intervals for high risk MOVs beyond a quarterly frequency, licensees shall ensure that the potential increase in core damage frequency and risk associated with the extension is small and consistent with the intent of the Commission's Safety Goal Policy Statement.
3. When implementing Code Case OMN-1, the benefits of performing a particular test should be balanced against the potential adverse effects placed on the valves or systems caused by this testing. For example, potential component (valve or pump) damage or system availability concerns may outweigh benefits of dynamic testing for some MOVs.

The implementation of OMN-1 will reconcile and consolidate the LaSalle County Station MOV testing program developed under Generic Letters (GL) 89-10 , "Safety Related Motor Operated Valve Testing and Surveillance," and 96-05 , "Periodic Verification of Design Basis Capability of Safety Related Motor operated Valves," with the IST program and eliminate unnecessary testing that provides minimal information about MOV operational readiness. As part of LaSalle's commitment on MOV Periodic Verification Testing made in response to GL 96-05, LaSalle is participating in the Joint Owners Group (JOG) Program for MOV Periodic Verification. This program is described in Topical Report MPR-1807, Rev. 2 and endorsed by the NRC in an October 1997 Safety Evaluation. Many of the JOG Program activities will be used to meet OMN-1 requirements; likewise, some JOG activities are in conflict with OMN-1. Exceptions and clarifications are described below.

PROPOSED ALTERNATIVE PROVISIONS

LaSalle County Station proposes to use the MOV testing requirements of the ASME OMa-1996, Subsection ISTC to revise the LaSalle County Station IST Program. The testing requirements of the ASME OMa-1996, Subsection ISTC have been recently approved by the NRC for use by licensees. Thus, the use of the testing requirements of the ASME OMa-1996, Subsection ISTC provides an acceptable level of quality and safety. Exercise and position indication testing per ISTC will be applied to those valves that are not subject to diagnostic testing as detailed in the following discussion.

Additionally, LaSalle County Station proposes to use the requirements of Code Case OMN-1 for MOV stroke time testing and position indication testing. The testing requirements of Code Case OMN-1 have been recently approved by the NRC for use by licensees provided certain commitments are met. LaSalle County Station implementation and compliance with the above identified commitments (Items 1-3) of Code Case OMN-1 are detailed below. Exceptions and clarifications to OMN-1 are also provided below. Finally, detailed discussion is provided for position indication testing in accordance with OMN-1 testing frequencies.

LaSalle County Station meets the above identified commitments (Items 1-3) as follows.

- A.1 LaSalle County Station MOV test frequencies identified in the IST program, do not exceed three refueling cycles (i.e., nominal 6 years). Therefore, the expectation that frequency of testing be evaluated and adjusted within 5 years or three refuel outages, whichever is longer, of OMN-1 implementation will be satisfied.
- A.2 LaSalle will exercise medium and low safety significant MOVs at least once every refuel cycle as required in Code Case OMN-1 Section 3.6.1. Initially, LaSalle County Station commits to continue to test high risk MOVs quarterly (Where it is not practicable to exercise a valve during plant operations, the valve will be exercised in cold shutdown or in refuel outages per OMN-1 Section 3.6.3.) After sufficient performance data have been obtained and evaluated for medium and low safety significant MOVs exercised at the extended frequency of at least once every refuel cycle, that data will be used in evaluating the same exercise frequency for high risk MOVs. When extending the exercise test intervals for high risk MOVs beyond a quarterly frequency, LaSalle County Station shall ensure that the potential increase in core damage frequency and risk associated with the extension is small and consistent with the intent of the Commission's Safety Goal Policy Statement. Upon extension of these frequencies, the IST Program will be appropriately revised.
- A.3 LaSalle County Station has performed differential pressure testing practicability reviews for GL 89-10 that evaluated the benefits of performing a particular test against the potential adverse effects placed on the valves or systems caused by this testing. The evaluation included an assessment of potential component (valve or pump) damage or system availability concerns that may outweigh benefits of dynamic testing for some MOVs. As a result, some MOVs are not subject to differential pressure testing, but are justified for design basis performance by analysis.
- B. LaSalle County Station requests relief from the following OMN-1 sections and proposes the following alternative.
- OMN-1 Section 3.3(b) requires inservice tests to be conducted in the as-found condition.
 - OMN-1 Section 3.4, "Effect of MOV Replacement, Repair, or Maintenance," requires deviations between the previous and new inservice tests to be identified and analyzed.
 - OMN-1 Section 6.3, "Evaluation of Data," requires evaluations to determine the amount of degradation in functional margin that occurred over time.

LaSalle County Station proposes not to perform as-found testing in all situations. Not performing as-found testing is justified by the manner in which we determine MOV functional margin and test interval. Unlike the example for determining test interval given in OMN-1 Section 6.4.4, LaSalle County Station uses a process which is less dependent on as-found testing. When pre-service testing is performed, a degradation factors is applied to extrapolate the appropriate test frequency based on a calculated decline in functional margin over time. Random selections of valves are as-found tested, and test results are used to validate degradation assumptions per JOG guidelines. This sample

as-found testing is applied to calculational methods to ensure functional margin is adequate over the testing interval. Therefore, LaSalle County Station requests relief from the requirement to always perform as-found testing, and will follow the commitments to GL 96-05 to perform some as-found tests.

C. Per the following clarifications LaSalle County Station is in compliance with OMN-1.

- C.1 OMN-1 Section 3.1 allows the use testing that was conducted prior to the implementation of OMN-1 if it meets the requirements of the Code case. LaSalle County Station intends to utilize the testing performed under GL 89-10 to satisfy the requirement for a one-time test to verify the capacity of each MOV to meet its safety-related design basis requirements.
- C.2 OMN-1 Section 3.2 requires that each MOV be tested during the preservice test period or before implementing inservice inspection. LaSalle County Station intends to utilize the testing performed under GL 89-10 to satisfy this requirement. LaSalle County Station will perform a new preservice test when an MOV undergoes maintenance or modification that could affect its performance.
- C.3 OMN-1 Section 3.3(b) states that maintenance activities, such as stem lubrication, shall not be conducted if they might invalidate the as-found condition for inservice testing. At LaSalle County Station the frequency of stem lubrication and periodic MOV verification testing differ considerably, and the times at which these activities are optimally performed often do not coincide. As part of our GL 96-05 program, as-found data is being collected for a sample population of MOVs under various lubrication conditions. The results from the as-found data was used to create stem factor variability assumptions that are used to estimate the effect of stem lubrication on stem performance over the entire lubrication cycle. Based on this, LaSalle County Station does not consider that stem lubrication invalidates the as-found condition of an MOV.
- C.4 OMN-1 Section 3.3(c) requires the inservice test program to include a mix of static and dynamic MOV performance testing. LaSalle County Station will utilize the JOG program's mix of static and dynamic MOV performance testing to satisfy this requirement. Additionally, LaSalle County Station will utilize the existing engineering standards to conduct evaluations to alter the mix of required MOV performance testing.
- C.5 OMN-1 Section 3.3.1(b) requires MOV inservice testing to be conducted every 2 refueling cycles or 3 years (whichever is longer), if insufficient data exists to determine inservice test frequencies. LaSalle County Station has sufficient MOV testing data to justify its current testing frequencies.
- C.6 OMN-1 Section 6.4.4 requires calculations for determining MOV functional margin to be evaluated to account for anticipated time related changes in performance. LaSalle County Station will utilize the JOG process for setting test frequencies which is based on margin and safety significance to meet this requirement.

- D. According to the final rule publication, OMN-1 can be used in lieu of rules for preservice and inservice testing as specified in ISTC, except for ISTC 4.3, "Seat Leakage Rate Testing." Therefore, the two-year frequency requirement for Valve Position Verification as specified in ISTC 4.1 does not apply for MOVs subject to OMN-1 testing. LaSalle County Station will perform position indication testing during MOV diagnostic testing at a frequency consistent with JOG guidelines.

- E. A comparison of GL 96-05 program to the IST program has identified a population of LaSalle County Station MOVs that have IST requirements but are not subject to diagnostic testing. LaSalle County Station will continue to exercise test and position indication test all of these MOVs in accordance with ISTC requirements. If future program changes result in additional MOVs that are also not subject to diagnostic testing, those MOVs will also be tested in accordance with ISTC requirements.

APPLICABLE TIME PERIODS

Relief is requested for the remainder of the second ten-year interval which is currently scheduled to end on October 11, 2006 for Unit 1 and May 7, 2007 for Unit 2.