

10 CFR 50.55a

RS-07-129

September 11, 2007

U. S. Nuclear Regulatory Commission
ATTN: 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: Supplemental Information to Support the Request for Relief from ASME OM Code for the Third Ten-year Inservice Testing Interval

- References:
1. Letter from S. Landahl (Exelon Generation Company, LLC) to U. S. NRC, "Proposed Third Ten-year Interval Inservice Testing Relief Requests," dated September 29, 2006
 2. Letter from G. P. Barnes, (Exelon Generation Company, LLC) to U. S. NRC, "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," dated June 14, 2002
 3. Letter from U. S. NRC to J. L. Skolds, (Exelon Generation Company, LLC), "LaSalle County Station, Units 1 and 2 – Request for Additional Information (TAC NOS. MB5529 AND MB5530)," dated August 15, 2002
 4. Letter from G. P. Barnes, (Exelon Generation Company, LLC) to U. S. NRC, "Response to Request for Additional Information Relief Request RV-14," dated September 20, 2002

In Reference 1, Exelon Generation Company, LLC, (EGC), requested approval of proposed alternatives to the American Society of Mechanical Engineers Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code), 2001 Edition through 2003 Addenda. These proposed alternatives (i.e., Relief Requests) concerned the LaSalle County Station Third Ten-year Inservice Testing (IST) interval, which is scheduled to start on October 12, 2007.

During teleconferences between the NRC and EGC on September 4 and September 11, 2007, EGC agreed to provide a revision to one of the four Relief Requests that were transmitted in Reference 1.

Specifically, EGC is revising the following Relief Request:

- RV-02, "Utilization of ASME Code Case OMN-1"

The revised relief request is presented in the attachment to this letter.

As stated in Reference 1, EGC requests approval of this request by October 11, 2007, based on the end date of the Second Ten-year Inservice Testing Interval.

Should you have any questions concerning this letter, please contact Alison Mackellar at (630) 657-2817.

Respectfully,

A handwritten signature in black ink, reading "Patrick R. Simpson". The signature is written in a cursive, flowing style.

Patrick R. Simpson
Manager - Licensing

Attachment: Relief Request RV-02, "Utilization of ASME Code Case OMN-1," Revision 1

Attachment
Valve Relief Request - RV-02
Utilization of ASME Code Case OMN-1
(Revision 1)
(Page 1 of 5)

Proposed Alternative in Accordance with 10 CFR 50.55a(a)(3)(i)

Alternative Provides Acceptable Level of Quality and Safety

1. ASME Code Component(s) Affected

All ASME Class 1, 2 and 3 Motor Operated Valves (MOV) scoped into the LaSalle County Station Inservice Testing Program subject to diagnostic testing per Generic Letter (GL) 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Power-Operated Valves," and can not be classified as Skid Mounted.

2. Applicable Code Edition and Addenda

ASME OM Code 2001 Edition through 2003 Addenda

3. Applicable Code Requirement

ISTC, excluding ISTC-3600, Testing of Valves, including MOVs

4. Reason for Request

Pursuant to 10 CFR 50.55a, "Codes and Standards," paragraph (a)(3), relief is requested from the requirements of ISTC-3521 and ISTC-5120. The proposed alternative would provide an acceptable level of quality and safety.

5. Proposed Alternative and Basis for Use

In the 2006 issuance of 10 CFR 50.55a, 10 CFR 50.55a(b) states in part, that Regulatory Guide 1.192, "Operating and Maintenance Code Case Acceptability, ASME OM Code," (June 2003), has been approved for incorporation by reference by the Director of the Office of the Federal Register pursuant to 5 U.S.C. 552(a) and 1 CFR Part 51. In Regulatory Guide 1.192, it states within Table 2, "Conditionally Acceptable OM Code Cases," that the alternative rules of ASME Code Case OMN-1 Revision 0, when applied in conjunction with the provisions for leakage rate testing in ISTC-3600, may be applied with the following provisions:

1. The adequacy of the diagnostic test interval for each valve must be evaluated and adjusted as necessary, but not later than five years or three refueling outages (whichever is longer) from initial implementation of ASME Code Case OMN-1.
2. When extending exercise test intervals for high risk MOVs beyond a quarterly frequency, licensees must 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.

Attachment
Valve Relief Request - RV-02
Utilization of ASME Code Case OMN-1
(Revision 1)
(Page 2 of 5)

3. When applying risk insights as part of the implementation of OMN-1, licensees must categorize MOVs according to their safety significance using the methodology described in Code Case OMN-3, "Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants," with the conditions discussed in this regulatory guide or use other MOV risk-ranking methodologies accepted by the NRC on a plant-specific or industry-wide basis with the conditions in the applicable safety evaluations.

This conditional acceptance of OMN-1 per Regulatory Guide 1.192 is applicable in lieu of the provisions for stroke-time testing in Subsection ISTC of the 1995 Edition up to and including the 2000 Addenda of the ASME OM Code.

LaSalle County Station proposes to use the requirements of Code Case OMN-1 for MOV stroke time testing and position indication testing.

The LaSalle County Station MOV testing program has been developed utilizing GL 89-10, "Safety Related Motor Operated Valve Testing and Surveillance," and GL 96-05, "Periodic Verification of Design Basis Capability of Safety Related Motor Operated Valves." The continued implementation of OMN-1 will continue to reconcile and consolidate testing within the IST program and eliminate unnecessary testing that provides minimal information about MOV operational readiness.

As part of LaSalle County Station'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, Revision 2 and was endorsed by the NRC in an October 1997 Safety Evaluation.

LaSalle County Station implementation and compliance with the above-identified provisions (Items 1-3) of Code Case OMN-1 are detailed below.

1. LaSalle County Station MOV test frequencies identified in the IST program do not exceed three refueling cycles (i.e., a nominal six years). Therefore, the expectation that frequency of testing be evaluated and adjusted within five years or three refuel outages, whichever is longer, of OMN-1 implementation will be satisfied.
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). When extending the exercise test intervals for high risk MOVs beyond a quarterly frequency, LaSalle County Station shall ensure that any potential increase in the core damage frequency and risk associated with the extension is small and consistent with the intent of the Commission's Safety Goal Policy Statement.

Attachment
Valve Relief Request - RV-02
Utilization of ASME Code Case OMN-1
(Revision 1)
(Page 3 of 5)

Upon extension of these frequencies, the IST Program will be appropriately revised.

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. This methodology has previously been accepted by the NRC by their approval of LaSalle County Station's initial OMN-1 Relief Request RV-14 for the second IST Interval, approved on November 21, 2002.

Exceptions to OMN-1

With LaSalle County Station compliance with the above provisions as stipulated in RG 1.192, LaSalle County Station requests relief from the following OMN-1 section 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 values 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 factor 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 computational methods used to ensure that the 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.

A comparison of GL 96-05 program to the IST program has identified a number of LaSalle County Station MOVs that have IST requirements but are not subject to diagnostic testing. LaSalle County Station will continue to stroke time test and position indication test these identified MOVs in accordance with ISTC requirements.

Attachment
Valve Relief Request - RV-02
Utilization of ASME Code Case OMN-1
(Revision 1)
(Page 4 of 5)

Technical Position

The following positions describe how LaSalle County Station interprets and complies with the various requirements of OMN-1.

1. OMN-1 Section 3.1 allows the use of 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 capability of each MOV to meet its safety-related design basis requirements.
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.
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 has been collected for a sample population of MOVs under various lubrication conditions. The results from this 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. As described above, Relief has been requested from OMN-1, Section 3.3(b) as it applies to inservice testing being conducted in the as-found condition. With this Relief, if testing were to occur directly following maintenance activities such as a stem lube, test results would not be invalidated as methods used to analyze the test results take into consideration testing under these circumstances. Therefore the intent of OMN-1, Section 3.3(b), that testing is performed under conditions that will not hinder the ability to determine applicable functional margins and determine operational readiness, is maintained utilizing the methods previously described.
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, which are consistent with the JOG standards, to conduct evaluations to alter the mix of required MOV performance testing, when applicable, in order to meet this requirement.
5. OMN-1 Section 3.3.1(b) requires MOV inservice testing to be conducted every two refueling cycles or three years (whichever is longer), until sufficient data exists to determine a more appropriate test frequency. LaSalle County Station

Attachment
Valve Relief Request - RV-02
Utilization of ASME Code Case OMN-1
(Revision 1)
(Page 5 of 5)

has sufficient MOV testing data to justify its current testing frequencies, and therefore meets this requirement.

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.
7. According to Table 2 of Regulatory Guide 1.192, the only testing that is described within ISTC that will need to continue to be performed with the adoption of OMN-1 is that of leakage testing as described by ISTC-3600. Therefore Position Indication Testing (PIT) as described by ISTC-3700 need not be specifically identified or performed per the requirements of ISTC. LaSalle County Station will however continue to perform position indication testing at a frequency consistent with JOG guidelines during MOV diagnostic testing.

6. Duration of Proposed Alternative

This proposed alternative will be utilized for the entire Third Ten-year IST Interval.

7. Precedents

This relief request was previously approved for the Second Ten-year IST Interval at LaSalle County Station Units 1 and 2 as Relief Request RV-14, documented in Safety Evaluation and Letter dated November 21, 2002.