

November 19, 2003

Mr. John L. Skolds, President
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2, ISSUANCE OF AMENDMENTS
RE: INTEGRATED LEAKAGE RATE TEST INTERVAL (TAC NOS. MB6574
AND MB6575)

Dear Mr. Skolds:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 148 to Facility Operating License No. NPF-11 and Amendment No. 162 to Facility Operating License No. NPF-18 for the LaSalle County Station, Units 1 and 2, respectively. The amendments are in response to your application dated October 24, 2002, and as supplemented by letter dated June 20, 2003.

The amendments revise Appendix A, Technical Specifications (TS), of the Facility Operating Licenses. Specifically, the changes revise TS 5.5.13, "Primary Containment Leakage Rate Testing Program," to reflect a one-time deferral of the primary containment Type A test to no later than June 13, 2009 for Unit 1 and no later than December 7, 2008 for Unit 2.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

William A. Macon, Jr., Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos.: 50-373 and 50-374

Enclosures: 1. Amendment No. 162 to NPF-11
2. Amendment No. 148 to NPF-18
3. Safety Evaluation

cc w/encls: See next page

LaSalle County Station Units 1 and 2

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The amendments revise Appendix A, Technical Specifications (TS), of the Facility Operating Licenses. Specifically, the changes revise TS 5.5.13, "Primary Containment Leakage Rate Testing Program," to reflect a one-time deferral of the primary containment Type A test to no later than June 13, 2009 for Unit 1 and no later than December 7, 2008 for Unit 2.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

William A. Macon, Jr., Project Manager, Section 2
Project Directorate III
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Docket Nos.: 50-373 and 50-374

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2. Amendment No. 148 to NPF-18
3. Safety Evaluation

cc w/encls: See next page

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EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-373

LASALLE COUNTY STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 162
License No. NPF-11

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by the Exelon Generation Company, LLC (the licensee), dated October 24, 2002, and as supplemented by letter dated June 20, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment and paragraph 2.C.(2) of the Facility Operating License No. NPF-11 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 162, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by Douglas V. Pickett for/

Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 19, 2003

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-374

LASALLE COUNTY STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 148
License No. NPF-18

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by the Exelon Generation Company, LLC (the licensee), dated October 24, 2002, and as supplemented by letter dated June 20, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment and paragraph 2.C.(2) of the Facility Operating License No. NPF-18 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 148, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by Douglas V. Pickett for/

Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 19, 2003

ATTACHMENT TO LICENSE AMENDMENT NOS. 162 AND 148

FACILITY OPERATING LICENSE NOS. NPF-11 AND NPF-18

DOCKET NOS. 50-373 AND 50-374

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the area of change.

Remove Pages

5.5-12
5.5-13

Insert Pages

5.5-12
5.5-13

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 162 TO FACILITY OPERATING LICENSE NO. NPF-11
AND AMENDMENT NO. 148 TO FACILITY OPERATING LICENSE NO. NPF-18
EXELON GENERATION COMPANY, LLC
LASALLE COUNTY STATION, UNITS 1 AND 2
DOCKET NOS. 50-373 AND 50-374

1.0 INTRODUCTION

By application dated October 24, 2002, (Ref. 1), and as supplemented by letter dated June 20, 2003 (Ref. 2), Exelon Generation Company, LLC (EGC, the licensee) requested changes to the Technical Specifications for the LaSalle County Station (LSCS), Units 1 and 2. The supplement dated June 20, 2003 provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on December 10, 2002 (67 FR 75876).

The proposed changes would revise Appendix A, Technical Specifications (TS), of the Facility Operating Licenses. Specifically the proposed changes would revise TS 5.5.13, "Primary Containment Leakage Rate Testing Program," to reflect a one-time deferral of the primary containment Type A test to no later than June 13, 2009 for Unit 1 and no later than December 7, 2008 for Unit 2.

Technical Specifications in Section 5.5.13 establish the leakage rate testing of the primary containments as required by Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50.54(o) and 10 CFR 50, Appendix J, Option B, "Performance-Based Leakage-Test Requirements," as modified by approved exemptions. Additionally, the testing conforms with the guidelines contained in Regulatory Guide 1.163, "performance-Based Containment Leak-Testing Program," dated September 1995.

EGC is requesting this one-time amendment in anticipation of a rule change to 10 CFR 50 extending the Type A testing frequency to at least 15 years. Approval of the proposed changes will allow sufficient time for this rule change to be processed and incorporated into the LaSalle County Station TS.

2.0 REGULATORY EVALUATION

The staff finds that the licensee in Attachment 2 of its submittal identified the applicable regulatory requirements. The regulatory requirements for which the staff based its acceptance are provided below.

10 CFR 50, Appendix J (Ref. 3), was revised in 1995 by the addition of Option B, "Performance-Based Requirements," to the original requirements, which were then designated as Option A, "Prescriptive Requirements." Option B requires that a Type A test be conducted at a periodic interval based on historical performance of the overall containment system. TS 5.5.13 requires that leakage rate testing be performed as required by 10 CFR Part 50, Appendix J, Option B, as modified by approved exemptions, and in accordance with the guidelines contained in Regulatory Guide (RG) 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995 (Ref. 4). RG 1.163, Section C, "Regulatory Position," states that licensees intending to comply with Option B in the revision to Appendix J should establish test intervals based upon the criteria in Section 11.0 of Nuclear Energy Institute (NEI) report 94-01, Revision 0, "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J," dated July 1995 (Ref. 5) rather than using test intervals specified in ANSI/ANS-56.8-1994, "Containment System Leakage Testing Requirements," dated 1994 (Ref. 6).

A Type A test is an overall (integrated) leakage rate test of the containment structure. The industry guidelines in Section 11 of NEI 94-01 specify an initial Type A test interval of 48 months, but allows an extended interval of 10 years based upon two consecutive successful tests. There is also a provision for extending the test interval an additional 15 months in certain circumstances. The two most recent Type A tests at both LSCS units have been successful, so the current interval requirement is 10 years. The licensee's proposed TS amendments would change the 10-year ILRT interval to a 15-year interval. The licensee's request for a one-time extension of the ILRT interval is based on the staff guidelines in RG 1.174 (Ref. 7).

The licensee is requesting an addition to TS 5.5.13, "Primary Containment Leakage Rate Testing Program," which would add an exception from the guidelines of RG 1.163 regarding the Type A test interval for each unit. Specifically, the proposed TS states that the first Unit 1 Type A test performed after the June 14, 1994, Type A test shall be performed no later than June 13, 2009, and the first Unit 2 Type A test performed after the December 8, 1993, Type A test shall be performed no later than December 7, 2008.

The local leakage rate tests (Type B and Type C tests), including their schedules, are not affected by this request. Also, the drywell-to-suppression-chamber bypass test, which is, at many plants, conducted coincident with the Type A test, is on a fixed 10-year interval which is not affected by this request. There are no other changes to any Code or regulatory requirement.

3.0 TECHNICAL EVALUATION

The staff has reviewed the licensee's regulatory and technical analyses in support of its proposed license amendment which are described in Attachments 2 and 5 of the licensee's submittal. The detailed evaluation below will support the conclusion that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

3.1 Applicable Technical Specification Requirements

For LaSalle County Station, Units 1 and 2, the licensee is proposing to revise the requirements in Section 5.5, "Programs and Manuals," of the TS for Containment Leakage Rate Testing by revising Paragraph "a" of Section 5.5.13 as follows:

1. NEI 94-01 - 1995, Section 9.2.3: The first Unit 1 Type A test performed after June 14, 1994 Type A test shall be performed no later than June 13, 2009.
2. NEI 94-01 - 1995, Section 9.2.3: The first Unit 2 Type A test performed after December 8, 1993 Type A test shall be performed no later than December 7, 2008.

3.2 Inservice Inspection for Primary Containment Integrity

LaSalle County Station, Units 1 and 2, are General Electric BWR/5 plants with Mark II primary containments. The containment consists of two compartments, the drywell and the suppression chamber. The drywell has the shape of a truncated cone and is integral with and above the cylindrical suppression chamber. The primary containment is penetrated by access penetrations, process piping, and electrical penetrations. The integrity of the penetrations and isolation valves are verified through Type B and Type C local leak rate tests (LLRTs) as required by 10 CFR Part 50, Appendix J. The overall leak-tight integrity of the primary containment is verified through integrated leak rate tests (ILRTs). These tests are performed to verify the essentially leak-tight characteristics of the containment at the design basis accident (DBA) pressure. The last ILRT of Unit 1 primary containment was performed in June 1994, and that for Unit 2 was performed in December 1993. With the extension of the ILRT interval, the licensee will perform the next overall verification of the Unit 1 containment no later than June 13, 2009. For the Unit 2 containment, it will be performed no later than December 7, 2008.

In Section 5.5 of Attachment 2 of the licensee's submittal, the licensee provided information related to the containment inservice inspection (CISI). A comprehensive CISI program was established in 1996, and the initial inspections were completed for both units by September 2001. The inspections were performed as required by 10 CFR 50.55a (Ref. 8) using the requirements of the 1992 Edition and the 1992 Addenda of the American Society of Mechanical Engineers *Boiler and Pressure Vessel Code* (ASME Code), Section XI, Subsections IWE and IWL (Refs. 9, and 10). The licensee also indicated that future containment inspections will be performed using the requirements of Subsections IWE and IWL of the 1998 Edition of Section XI of the ASME Code, as modified by NRC-approved relief requests. In order to understand the licensee's plans for the subsequent containment inspections, the staff requested that the licensee provide information regarding the use of the 1998 Edition of the ASME Code. In its supplemental letter the licensee explained that "the NRC approval did not require initiation of a new 10-year interval for containment inspection, and, thus, the 1992 Edition including the 1992 Addenda will be considered as the Code of record for the first 10-year interval." The licensee also indicated that its commitments identified in the authorized relief request are of a similar nature to the modifications and limitations of 10 CFR 50.55a(b)(2) for the 1998 Edition through the 2000 Addenda of the ASME Code. The staff finds the process used by the licensee in

implementing the CISI requirements meets the regulatory requirements of 10 CFR 50.55a and is, thus, acceptable.

Additionally, the licensee describes in its submittal a summary of the results of the initial inspections, protective coating inspections, and maintenance rule inspections related to the LCS containments. In response to the staff's request for information on significant findings (i.e., pits in excess of 10% of the nominal liner thickness) in the submerged area of the wet-well, the licensee stated:

No significant findings (i.e., pits in excess of 10% of the nominal liner thickness) have been observed in the submerged areas of Suppression Pool. It has been determined that there is no loss of section or structural integrity.

Based on the description of the LSCS containment inspections in the licensee's submittal, and the licensee's response to the staff's request for additional information, the staff considers the process used by the licensee to perform containment liner inspection to be adequate in identifying potential degradation and assuring the containment structural integrity and is, thus, acceptable.

In response to the staff's request for additional information on the schedule of testing (inspection) of containment penetration seals and gaskets, the licensee provided the following information:

The LSCS scheduling rules as allowed by Option B of Appendix J are as follows.

- The initial test frequency for performing a leak test on seals and gaskets, which are Type B components, is a base interval of 30 months. The interval may be extended to up to 120 months based on acceptable performance. Acceptable performance for extending this interval is established by passing two as-found LLRTs with leakage less than or equal to the established administrative limits and that are at least 24 months apart or a normal refueling interval. Type B components whose test intervals are extended to greater than 60 months are tested on a staggered basis to allow for early detection of common mode failure mechanism.
- If a test result is greater than the administrative limit for the components, the component is restored to a leak rate below the administrative limit and the test interval is re-established at 30 months.

Additionally, any repair or disassembly of a component with a seal, gasket, or bolted connection requires a post-maintenance Appendix J Type B test.

Based on the description of the licensee's program for monitoring the leaktightness and degradation of penetration seals, gaskets, and pressure retaining bolts of the primary containments, the staff finds that the licensee provides reasonable assurance that the overall leaktight integrity of the containment will be maintained during the ILRT extended interval.

In response to the staff's question on the findings and acceptance criteria related to the containment concrete and reinforcing bars, the licensee provided a summary of findings and

the licensee's basis for acceptability. Moreover, the licensee stated that it has developed its visual inspection procedures based on the guidelines of American Concrete Institute (ACI) publication 201.1R-92 (Ref. 11), and ACI 349.3R-96 (Ref. 12).

Because the ASME Code, Section XI, Subsection IWL does not provide detailed requirements for examination of the condition of containment concrete, the staff finds the licensee's plan to utilize the available industry standards for this purpose provides reasonable assurance that adequate guidance for evaluating concrete degradation will be used and is, thus, acceptable.

In response to a question on incorporating the potential degradation in uninspectable areas of the containment in the risk assessment, the licensee stated in its supplemental letter that they considered the following key assumptions in its risk assessment:

- A half failure is assumed for basemat concealed liner corrosion due to the lack of identified failures.
- The two corrosion events used to estimate the liner flaw probability in the Calvert Cliffs analysis are assumed to be applicable to the LaSalle containment analysis. These events, one at North Anna Unit 2 and one at Brunswick Unit 2, were initiated from the non-visible (backside) portion of the containment liner.
- The estimated historical flaw probability is calculated using a 5.5 year data period to reflect the years since September 1996 when 10 CFR 50.55a started requiring visual inspection.
- The corrosion-induced steel liner flaw likelihood is assumed to double every five years. This is based solely on judgment and is included in this analysis to address the increased likelihood of corrosion as the steel liner ages.
- In the Calvert Cliffs analysis, the likelihood of the containment atmosphere reaching the outside atmosphere given that a liner flaw exists was estimated (based on an assessment of the containment fragility curve versus the ILRT test pressure) as 1.1% for the containment walls and dome region and 0.11% for the basemat. For LaSalle, the containment failure probabilities are conservatively assumed to be 10% for the drywell and wetwell outer walls, and since the basemat for the LaSalle Mark II containment is in the suppression pool, it is judged that failure of this area would not lead to LERF. In any event, a 1% probability is assigned as a conservatism.
- A 5% visual inspection detection failure likelihood given the flaw is visible and a 5% likelihood of a non-detectable flaw is used. Therefore, a total undetected flaw probability of 10% is assumed in the base case analysis. Again, this is considered conservative since essentially 100% of the LaSalle containment interior surface is visible, whereas only 85% of the interior wall surface was estimated as being visible at Calvert Cliffs. Additionally, it should be noted that to date, all liner corrosion events have been detected through visual inspection and repaired.

- All non-detectable containment failures are assumed to result in early releases. This approach avoids a detailed analysis of containment failure timing and operator recovery actions.

Based on its review of the information provided in the licensee's original amendment request and supplemental submittal, the staff finds that: (1) the structural degradation of the accessible areas of the LaSalle containments will be adequately monitored through the periodic inservice inspection conducted as required by Subsections IWE and IWL of Section XI of the ASME Code, and (2) the integrity of the penetrations and containment isolation valves will be periodically verified through Type B and Type C tests as required by 10 CFR Part 50, Appendix J. In addition, the system pressure tests for containment pressure boundary (i.e., Appendix J tests, as applicable) are required to be performed following repair and replacement activities in accordance with Subarticle IWE-5000 and IWL-5000 of Section XI of the ASME Code. Significant degradation of the primary containment pressure boundary is required to be reported under 10 CFR 50.72 or 10 CFR 50.73.

3.3 Probabilistic Risk Assessment Evaluation

The licensee has performed a risk impact assessment of extending the Type A test interval to 15 years. The risk assessment was provided in the October 24, 2002, application for license amendment. Additional analysis and information was provided by the licensee in its supplemental letter dated June 20, 2003. In performing the risk assessment, the licensee considered the guidelines of NEI 94-01, RG 1.174, and the methodology used in Electric Power Research Institute (EPRI) TR-104285, "Risk Impact Assessment of Revised Containment Leak Rate Testing" (Ref. 13).

The basis for the current 10-year test interval is provided in Section 11.0 of NEI 94-01, Revision 0, and was established in 1995 during the development of the performance-based Option B of Appendix J. Section 11.0 of NEI 94-01 states that NUREG-1493, "Performance-Based Containment Leak-Test Program," provided the technical basis to revise leakage rate testing requirements contained in Option B of Appendix J. The basis consisted of qualitative and quantitative assessments of the risk impact (in terms of increased public dose) associated with a range of extended leakage rate test intervals. To supplement this basis, industry undertook a similar study. The results of that study are documented in EPRI TR-104285.

The EPRI study used an analytical approach similar to that presented in NUREG-1493 for evaluating the incremental risk associated with increasing the interval for Type A tests. The Appendix J, Option A, requirements that were in effect for LaSalle County Station, Units 1 and 2, early in the plant's life required a Type A test frequency of three tests in 10 years. The EPRI study estimated that relaxing the test frequency from three tests in 10 years to one test in 10 years would increase the average time that a leak that was detectable only by a Type A test goes undetected from 18 to 60 months. Since Type A tests only detect about 3 percent of the leaks (the rest are identified during local leak rate tests based on industry leakage rate data gathered from 1987 to 1993), this results in a 10 percent increase in the overall probability of leakage. The risk contribution of pre-existing leakage for the pressurized water reactor and boiling water reactor representative plants in the EPRI study confirmed the NUREG-1493 conclusion that a reduction in the frequency of Type A tests from three tests in 10 years to one

test in 20 years leads to an "imperceptible" increase in risk that is on the order of 0.2 percent and a fraction of one person-rem per year in increased public dose.

Building upon the methodology of the EPRI study, the licensee assessed the change in the predicted person-rem/year frequency. The licensee quantified the risk from sequences that have the potential to result in large releases if a pre-existing leak were present. Since the Option B rulemaking in 1995, the staff has issued RG 1.174 on the use of probabilistic risk assessment (PRA) in evaluating risk-informed changes to a plant's licensing basis. The licensee has proposed using RG 1.174 guidance to assess the acceptability of extending the Type A test interval beyond that established during the Option B rulemaking.

RG 1.174 defines very small changes in the risk-acceptance guidelines as increases in core damage frequency (CDF) less than 10^{-6} per year and increases in large early release frequency (LERF) less than 10^{-7} per year. Since the Type A test does not impact CDF, the relevant criterion is the change in LERF. The licensee has estimated the change in LERF for the proposed change and the cumulative change from the original frequency of three tests in a 10-year interval. RG 1.174 also discusses defense-in-depth and encourages the use of risk analysis techniques to help ensure and show that key principles, such as the defense-in-depth philosophy, are met. The licensee estimated the change in the conditional containment failure probability for the proposed change to demonstrate that the defense-in-depth philosophy is met.

The licensee provided analyses, as discussed below. The following comparisons of risk from a change in test frequency from three tests in 10 years to one test in 15 years are considered to be bounding for LaSalle County Station, Units 1 and 2, comparative frequencies of one test in 10 years to one test in 15 years. The following conclusions can be drawn from the analysis associated with extending the Type A test frequency:

1. Given the change from a three in 10-year test frequency to a one in 15-year test frequency, the increase in the total integrated plant risk is estimated to be about 0.08 person-rem per year. This increase is comparable to that estimated in NUREG-1493, where it was concluded that a reduction in the frequency of tests from three in 10 years to one in 20 years leads to an "imperceptible" increase in risk. Therefore, the increase in the total integrated plant risk for the proposed change is considered small and supportive of the proposed change.
2. The increase in LERF resulting from a change in the Type A test frequency from the original three in 10 years to one in 15 years is estimated to be 3.0×10^{-8} per year based on the internal events PRA. However, there is some likelihood that the flaws in the containment estimated as part of the Class 3b frequency would be detected as part of the IWE/IWL visual examination of the containment surfaces (as identified in American Society of Mechanical Engineers [ASME] Boiler and Pressure Vessel Code, Section XI, Subsections IWE/IWL). Visual inspections are expected to be effective in detecting large flaws in the visible regions of containment, and this would reduce the impact of the extended test interval on LERF. The licensee's risk analysis considered the potential impact of age-related corrosion/degradation in inaccessible areas of the containment liner on the proposed change. The increase in LERF associated with corrosion events is estimated to be less than 1×10^{-8} per year. The staff concludes that increasing the

Type A interval to 15 years results in only a small change in LERF and is consistent with the acceptance guidelines of RG 1.174.

3. RG 1.174 also encourages the use of risk analysis techniques to help ensure and show that the proposed change is consistent with the defense-in-depth philosophy. Consistency with the defense-in-depth philosophy is maintained if a reasonable balance is preserved between prevention of core damage, prevention of containment failure, and consequence mitigation. The licensee estimates the change in the conditional containment failure probability to be an increase of 0.5 percentage points for the cumulative change of going from a test frequency of three in 10 years to one in 15 years. The staff finds that the defense-in-depth philosophy is maintained based on the small magnitude of the change in the conditional containment failure probability for the proposed amendment.

Based on these conclusions, the staff finds that the increase in predicted risk due to the proposed change is within the acceptance guidelines, while maintaining the defense-in-depth philosophy, of RG 1.174, and, therefore, is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (67 FR 75876). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Based on the above evaluation, the staff finds that the licensee has adequate procedures to examine and monitor potential age-related and environmental degradations of the pressure-retaining components of the LaSalle County Station, Units 1 and 2, containments. Thus, the

staff finds the proposed one-time 5-year extension to the current 10-year test interval for the containment integrated leakage rate testing program and the proposed changes to TS Section 5.5.13 are acceptable.

7.0 REFERENCES

1. Letter from K. Jury (Exelon) to NRC, "Request for Amendment to Technical Specification 5.5.13, Primary Containment Leakage Rate Test Program," October 24, 2002.
2. Letter from T. Simpkin (Exelon) to NRC, "Response to Request for Additional Information to Support Request for Amendment to Technical Specification 5.5.13, Primary Containment Leakage Rate Test Program," June 20, 2003.
3. 10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors."
4. USNRC Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," September 1995.
5. Nuclear Energy Institute, "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J," NEI 94-01, Revision 0, July 1995.
6. ANSI/ANS-56.8, "Containment System Leakage Testing Requirements," 1994.
7. USNRC Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," July 1998.
8. 10 CFR 50.55a, "Codes and standards."
9. ASME *Boiler and Pressure Vessel Code*, Section XI, Subsection IWE, "Requirements for Class MC and Metallic Liners of Class CC Components of Light-Water Cooled Plants," 1992 Edition including 1992 Addenda.
10. ASME *Boiler and Pressure Vessel Code*, Section XI, Subsection IWL, "Requirements for Class CC Components of Light-Water Cooled Plants," 1992 Edition including 1992 Addenda.
11. American Concrete Institute, "Condition Survey of Concrete Structures," ACI 201.1R-92, 1992.

12. American Concrete Institute, "Evaluation of Safety-Related Nuclear Concrete Structures," ACI 349.3R-96, 1996.
13. Electric Power Research Institute, "Risk Impact Assessment of Revised Containment Leak Rate Testing Intervals." EPRI TR-104285, August 1994.

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