



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

October 11, 1991

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: LaSalle County Station Unit 2 Request for One-time
Exemption from Appendix J, to 10 CFR Part 50 Accelerated
Type A Testing Requirements and Request for Amendment to
Facility Operating Licenses NPF-11 and NPF-18,
Appendix A, Technical Specification Surveillance
Requirement 4.6.1.2.
NRC Docket Nos. 50-373 and 50-374

Dear Sir:

LaSalle County Station Unit 2 has experienced Containment Integrated Leak Rate Test (CILRT) failures for "as-found" conditions at the first and the third refueling outages. The CILRT failures were a result of the significant contributions from Type B and C Local Leak Rate Test (LLRT) failures. The requirements of 10 CFR 50, Appendix J, Section III.A.6(b) and Technical Specification Surveillance Requirement 4.6.1.2.b are therefore applicable and thus, a CILRT is required at the upcoming fourth refueling outage for Unit 2 (L2R04).

IE Information Notice (IEN) No. 85-71 ("Containment Integrated Leak Rate Tests," dated August 22, 1985) provides guidance to licensees for proposing alternative leakage test programs to the NRC Staff in lieu of increasing the frequency of CILRT testing. An improved maintenance and testing program better serves the underlying general purpose of the test program to maintain a high degree of containment integrity. However, IEN 85-71 requires that the Type B and C leakage rates significantly contribute to the failures of the "as-found" condition for the CILRT. As discussed below, LaSalle's CILRT failures were the direct result of significant contributions from Type B and C failures; therefore, pursuant to 10 CFR 50.12(a), Commonwealth Edison Company (CECo) requests a one-time exemption from the need to accelerate the schedule for performing additional containment integrated leak rate test (CILRT) at LaSalle County Station Unit 2 (LaSalle), as required by 10 CFR Part 50, Appendix J, Section III.A.6(b). In lieu of the accelerated test frequency, LaSalle will conduct an aggressive Corrective Action Plan which will directly address and eliminate the local sources of leakage. Under these circumstances, LaSalle meets the criteria for an exemption as demonstrated below.

The requested exemption would enable LaSalle to maintain the normal leak rate testing schedule frequency consistent with the special circumstances which support the approval of this exemption. Similar circumstances have been officially recognized as a sufficient basis for such an exemption by the Nuclear Regulatory Commission (IEN 85-71). Consistent with the guidance in this Notice, the NRC has granted exemptions under these circumstances at other plants, Palisades and Duane Arnold, thereby avoiding both the unnecessary diversion of resources and occupational radiation exposures.

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An exemption is equally appropriate for LaSalle because its circumstances are similar to those which supported grants of exemptions at other plants. Just as at those other plants: (1) LaSalle's containment structure itself satisfies the Type A CILRT test criteria; (2) failure of the CILRT has been verified by the NRC to have resulted only from the significant contributions of local leak failures from Types B and C local leak rate tests (LLRT); and (3) corrective actions have and will either eliminate or reduce those local leakages significantly. The corrective actions are described within the attachments to this letter along with an explanation of how they support this exemption request.

Also included, for technical regulatory reasons, is a companion Technical Specification Amendment for Surveillance Requirement 4.6.1.2. This amendment is necessary to effectuate the exemption because the Appendix J testing requirement is repeated in the Tech Specs. However, because this Tech Spec contains no additional requirements, the circumstances which support the exemption also support the amendment. Also satisfied is the requirement that the amendment does not present a significant hazards consideration. This is demonstrated by the evaluation in Attachment E.

This proposed exemption request and Technical Specification Amendment is subdivided as follows:

1. Attachment A gives a description of the Exemption Request for the Containment Integrated Leak Rate Test (CILRT).
2. Attachment B includes the marked-up Technical Specification pages for both Unit 1 and Unit 2. The amendment request is being submitted for both units to allow any potential future Type A exemption requests for Unit 1.
3. Attachment C includes the Corrective Action Plan proposed by LaSalle Station in lieu of performing the accelerated Type A CILRT schedule.
4. Attachment D summarizes the proposed Type A Test schedule for LaSalle Unit 2.
5. Attachment E described CECO's evaluation performed in accordance with 10 CFR 50.92(c), which confirms that no significant hazards consideration is involved.
6. Attachment F provides the Environmental Assessment.

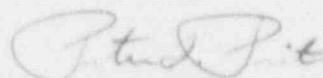
The proposed exemption and Technical Specification Amendment has been reviewed and approved by Commonwealth Edison On-Site Review and Off-site Review in accordance with Commonwealth Edison procedures.

LaSalle Unit 2 is required to conduct a CILRT during the next refueling outage scheduled to begin in January 1992 unless the requested exemption is granted; therefore, CECO requests a preliminary response to this request by December 15, 1991 with subsequent formal approval of the exemption and issuance of the Technical Specification Amendment no later than January 31, 1992.

October 11, 1991

Please direct any questions you may have concerning this submittal to this office.

Sincerely,



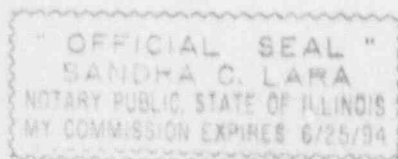
Peter L. Piet
Nuclear Licensing Administrator

Attachments:

- A. Description of the Exemption Request for the CILRT
- B. Marked-up Technical Specification Pages
- C. Proposed Corrective Action Plan
- D. Proposed Type A CILRT Test Schedule
- E. Evaluation of Significant Hazards Consideration
- F. Environmental Assessment

cc: A.B. Davis - Regional Administrator, RIII
Senior Resident Inspector - LSCS
B.L. Siegel - NRR, Project Manager
Office of Nuclear Facility Safety - IDNS

Signed before me on this 11th day
of October, 1991,
by [Signature]
Notary Public



ATTACHMENT A

EXEMPTION REQUEST FOR THE CONTAINMENT INTEGRATED LEAK RATE TEST

BACKGROUND

LaSalle County Station Unit 2 has experienced Containment Integrated Leak Rate Test (CILRT, Type A test) failures for "as-found" conditions at the first (L2R01, January 1987) and the third (L2R03, March 1990) refueling outages. The CILRT failures were a result of significant contributions from Local Leak Rate Test (LLRT, Type B and C) failures. The requirements of 10 CFR 50 Appendix J, Section III.A.6(b) are therefore applicable and thus, a CILRT is required at the upcoming fourth refueling outage (L2R04) due to the two consecutive "as-found" CILRT failures.

Appendix J establishes two types of leak rate tests with separate criteria. The Local Leak Rate Tests (LLRT Type B and C) are performed during each refueling outage. The CILRT (Type A) is only performed every three or four years to achieve three Type A tests in a ten year period. The LLRTs provide a periodic surveillance of components, such as isolation valves and resilient seals. The CILRT provides a measure of the overall integrated leakage rate of the containment including testing of passive and structural components and verifies the adequacy of the LLRT program.

An additional CILRT is not warranted under these circumstances. It is not necessary to perform a CILRT for demonstrating that the failures due to local leaks (Type B and C Tests) have been corrected. Local leak rate tests are sufficient to confirm that local leaks have been fixed. A CILRT would divert resources and result in occupational radiation exposures unnecessarily. Moreover, a CILRT would not pinpoint any remaining excessive local leaks. Those could only be found by additional LLRTs. Based upon guidance provided in IE Information Notice 85-71, LaSalle's aggressive Corrective Action Plan and the previous Appendix J Type A exemptions granted to the Duane Arnold Energy Center and Palisades, the following discussion provides sufficient justification for granting a similar exemption to Commonwealth Edison Company for LaSalle Unit 2.

BASIS FOR THE EXEMPTION REQUEST

Pursuant to the requirements of 10 CFR 50.12(a), Commonwealth Edison is requesting a one time exemption from the requirements of 10 CFR Part 50, Appendix J, Section III.A.6(b) which states,

"If two consecutive periodic Type A tests fail to meet the applicable acceptance criteria in III.A.5.(b), notwithstanding the periodic retest schedule of III.D., a Type A test shall be performed at each shutdown for refueling or approximately every 18 months, whichever occurs first, until two consecutive Type A tests meet the acceptance criteria in III.A.5.(b), after which time the retest schedule specified in III.D may be resumed."

This exemption request is made so that the Type A retest schedule of three times in ten years as specified in 10 CFR Part 50, Appendix J, Section III.D may be resumed at LaSalle County Station Unit 2.

ATTACHMENT A (continued)

BASIS FOR REQUESTING TECHNICAL SPECIFICATION AMENDMENT

In addition to this exemption, LaSalle County Station is requesting a Technical Specification Amendment for both the LaSalle Unit 1 and LaSalle Unit 2 Technical Specifications for Surveillance Requirement 4.6.1.2 and 4.6.1.2.b. Surveillance Requirement 4.6.1.2.b restates the requirement for increased Type A test frequency as specified in 10 CFR Part 50, Appendix J, Section III.A.6(b), and reads,

"... If two consecutive Type A tests fail to meet 0.75 La, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet 0.75 La, at which time the above test schedule may be resumed."

The following changes would allow exemptions granted by the NRC related to Containment Integrated Leak Rate Tests without contradicting the Technical Specifications as previously approved.

Revise Surveillance Requirement 4.6.1.2 by adding a statement indicating that the test schedule is subject to any exemptions granted by the Commission.

Revise Surveillance Requirement 4.6.1.2.b by adding to the beginning of the statement regarding two consecutive Type A test failures that the requirement is applicable unless an exemption is granted by the Commission.

The proposed amendment to the Primary Containment Leakage Technical Specification Surveillance Requirements does not alter the test pressures or method of performing the CILRT. 10 CFR 50 Appendix J requirements for test frequency are restated as the surveillance in this Technical Specification and Information Notice 85-71 recommends pursuit of exemption requests in lieu of increased Type A test frequency. It is therefore appropriate that this Technical Specification be amended to allow the use of the exemption process already in place in 10 CFR Part 50.12(a).

Consumers Power Company, License DPR-20, amended their Technical Specifications to allow the CILRT to be conducted per Appendix J or approved exemptions. NUREG-1433 "Standard Technical Specifications, General Electric Plants, BWR/4", draft report for comment, specifies the following CILRT frequency:

"In accordance with 10 CFR 50, Appendix J, as modified by approved exemptions as contained in the Primary Containment Leakage Rate Testing Program."

NEDC-31681, Class I, April, 1989, "BWR Owners' Group Improved BWR Technical Specifications, Volume 2, BWR/4 Technical Specification" specifies the following surveillance and frequency:

"... in accordance with 10 CFR 50 Appendix J and approved exemptions."

The proposed amendment to the LaSalle Technical Specifications is consistent with specific approved amendments and proposed changes to the Standard Technical Specifications. Approval of these amendments will also simplify the preparation, processing and review of any future exemption requests regarding Containment Integrated Leak Rate testing, without disagreement with Technical

ATTACHMENT A (continued)

BASIS FOR REQUESTING TECHNICAL SPECIFICATION AMENDMENT (continued)

Specification requirements. There is negligible safety impact as any exemptions require justification to and approval by the NRC in accordance with 10 CFR 50.12(a). The Technical Specification Bases for Specification 3/4.6.1.2 is changed to refer to IE Information Notice 85-71 as the bases of allowing the CILRT surveillance requirements to be modified by exemptions granted by the Commission and is included as a revised page.

In addition to the information below, an evaluation of Significant Hazards Consideration is enclosed as Attachment E to support this Technical Specification Amendment request.

OVERVIEW OF LASALLE UNIT 2 CILRT PERFORMANCE

As previously mentioned, LaSalle County Station Unit 2 has experienced Containment Integrated Leak Rate Test (CILRT, Type A test) failures (exceeding the 0.75 La limit) for the "as-found" condition at the first and the third refueling outages as a result of significant contributions from Type B and C (LLRT) failures. The requirements of 10 CFR 50 Appendix J, Section III.A.6(b) are therefore applicable and thus, a CILRT is required at the upcoming fourth refueling outage (L2R04) due to two consecutive "as-found" CILRT failures. The following table lists the associated License Event Reports documenting the CILRT failures for LaSalle Unit 2.

<u>REFUEL OUTAGE</u>	<u>DATE</u>	<u>LICENSE EVENT REPORT NO.</u>
1, L2R01	January, 1987	374-87-002, Revision 1
3, L2R03	March, 1990	374-90-004, Revision 1

Exceeding the allowable leakage rate during the performance of the CILRT is indicative of either a passive or a structural component that is leaking or that there is an inadequacy in the Local Leak Rate Test program. When the failure of a CILRT is due to a passive or structural component, the only test for adequate repair would be the CILRT. For a Local Leak Rate Test program inadequacy, the CILRT would serve as a means of verification of the results of the test program.

LER 374-87-002, Revision 1 and LER 374-90-004, Revision 1 documents the first and second CILRT failures for LaSalle Unit 2, respectively. Both CILRTs failed as a direct result of "as-found" LLRT minimum pathway leakage penalty additions. A non-Local Leak Rate tested component or structure (passive or structural component) did not cause the failure of a CILRT at LaSalle Unit 2. The more frequent performance of the CILRT as required by Appendix J and the LaSalle Unit 2 Technical Specifications due to the significant contribution of Local Leak Rate Test failures is redundant to the performance of LLRTs; therefore, there is little or no benefit to be gained by performing a Type A test on an accelerated schedule.

ATTACHMENT A (continued)

SUPPORTING JUSTIFICATION FOR APPENDIX J EXEMPTION

The following provides supporting information for the exemption request from the requirements of 10 CFR 50, Appendix J for LaSalle Unit 2:

1. IE Information Notice 85-71 dated August 22, 1985 states in part,

"... if Type B and C leakage rates constitute an identified contributor to this failure of the "as-found" condition for the CILRT, the general purpose of maintaining a high degree of containment integrity might be better served through an improved maintenance and testing program for containment penetration boundaries and isolation valves. In this situation, the licensee may submit a Corrective Action Plan with an alternative leakage test program proposal as an exemption request for NRC staff review. If this submittal is approved by the NRC staff, the licensee may implement the corrective action and alternative leakage test program in lieu of the required increase in Type A test frequency incurred after the failure of two successive Type A tests."

LaSalle Station is proposing a Corrective Action Plan (CAP) in lieu of the performance of a Type A CILRT for L2R04. The CAP is outlined in Attachment C. The basis for LaSalle's CAP meets the intentions of IE 85-71. Previous CILRT failures for LaSalle Unit 2 were the direct result of the contributions from "as-found" Type B and C leakage additions. The actions specified in LaSalle's CAP proactively strive to identify and reduce potential primary containment leakage pathways. The implementation of the CAP by LaSalle reduces the likelihood of future excessive "as-found" Type B or C leakage rates; therefore, the performance of an accelerated CILRT schedule has negligible benefit for LaSalle Station.

2. 10 CFR Part 50.12(a) indicates that the Commission may grant exemptions if the exemption will not present undue risk to public health and safety, is consistent with the common defense and security and special circumstances are present. An exemption is authorized by law only because the regulation requires the test and the NRC is authorized to grant exemptions from its regulations. No undue risk to public health and safety would result from this exemption because local leakage will be corrected in accordance with the Corrective Action Plan described in Attachment C. The common defense and security is not affected by this exemption; therefore, the exemption conditions in 10 CFR 50.12(a)(1) are satisfied completely.

One of the special circumstances presented in Part 50.12(a)(2)(ii) is,

"Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule."

The purpose of 10 CFR 50 Appendix J, Section III.A.6(b) is to ensure that unacceptable containment leakage is identified and corrected. That purpose is not fully served if the failure of the test is known to be significantly contributed to by local leaks. A Type A test can only demonstrate that all local leaks have been adequately corrected;

ATTACHMENT A (continued)

SUPPORTING JUSTIFICATION FOR APPENDIX J EXEMPTION (continued)

It cannot identify any local leaks which have not been adequately corrected. A Type A test is too crude to effectively verify the correction of local leaks. Additional local leak rate tests clearly demonstrate the effectiveness of corrections to local leaks. As described herein, performance of a Type A test at the next refueling outage is not necessary to satisfy this purpose.

3. 10 CFR Part 50.12(a)(2)(iv) identifies as another special circumstance:

"The exemption would result in a benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption."

LaSalle Station projects that being granted an exemption from the requirements to perform a CILRT at the next refueling outage will result in avoidance of radiological dose of 3 person-rem to plant personnel that would otherwise result. No comparable decrease in public health and safety will result from the approval of the exemption because excessive leakage will be managed aggressively by the Corrective Action Plan. Thus, this exemption criterion also is clearly satisfied.

4. Region III of the Nuclear Regulatory Commission conducted a routine safety inspection at LaSalle Station on June 11 to 13, 1990 to evaluate the local leak rate and integrated leak rate testing programs. Inspection Reports 50-373/90012 and 50-374/90013 were issued as a result of this inspection.

The NRC inspector noted at that time that LaSalle had failed two consecutive "as-found" Type A tests on the Unit 2 Primary Containment. The NRC Inspector identified several penetrations (valves) which appeared to have recurrent leakages that contributed to the "as-found" Type A test failures and caused the majority of the leakages. The inspector included a discussion of the Type C failures in detail in Section 5 of the Inspection Report.

In response to the root cause of the "as-found" Type A failures and NRC concerns associated with those failures, LaSalle has taken aggressive action to eliminate the recurrence of failures within a small population of Type C components (valves). LaSalle's response to NRC Inspection Report 50-373/90012 and 50-374-0013 demonstrates that a permanent resolution has been achieved for repetitive Type C failures.

5. Prior precedent has been set by the NRC Staff in granting an exemption to the Consumers Power Palisades Plant for performing accelerated Type A testing as documented in the letter from T.V. Wambach to K.W. Perry dated September 17, 1987 (TAC NO. 62841). The Palisades Plant had failed the acceptance criteria for its last three Type A tests prior to the exemption request due to leakage through containment penetrations. Palisades proposed an aggressive Corrective Action Plan (August 22, 1986) in lieu of more frequent Type A tests because the failures of the Type A tests were the result of Type B and Type C penalty additions to the test results. Palisades' Corrective Action Plan concentrated on Leak Rate Testing

ATTACHMENT A (continued)

SUPPORTING JUSTIFICATION FOR APPENDIX J EXEMPTION (continued)

program improvements and identification of problematic valves and penetrations rather than specific valve corrective actions. The LaSalle Unit 2 Corrective Action Plan is primarily directed at overall Leak Rate Test program improvements and trending with engineering evaluation similar to Palisades. The NRC Staff granted the exemption following its review of Palisades' Corrective Action Plan confirming that it met the guidance of NRC Office of Inspection and Enforcement Information Notice No. 85-71.

6. By letter dated June 29, 1990, from J.R. Hall to Lee Liu, Iowa Electric Light and Power Company received approval for an exemption from Appendix J, 10 CFR Part 50, for the Containment Integrated Leak Rate Test interval for the Duane Arnold Energy Center (TAC NO. 76421). Duane Arnold proposed a Corrective Action Plan (April 2, 1990) to eliminate excessive local leakage in accordance with NRC Information Notice 85-71. The Corrective Action Plan was proposed in lieu of the increased test frequency required by Appendix J to 10 CFR Part 50. Duane Arnold's Corrective Action Plan involved the repair, modification, maintenance, and special testing of the Main Steam Isolation Valves and Feedwater Check Valves. These valves had been the significant contributors to the "as-found" CILRT failures due to excess leakage through these valves. LaSalle initially had problems with MSIV's and Feedwater check valves but corrected these problems through modifications and procedure changes; therefore, LaSalle Station no longer has LLRT problems with their MSIV's or Feedwater Check Valves. However, LaSalle's Corrective Action Plan (Attachment C) includes similar successful or planned corrective actions for specific valves. The NRC Staff granted the exemption following its review of Duane Arnold's Corrective Action Plan. Their review concluded that the Corrective Action Plan provided an equivalent degree of assurance that containment integrity was maintained as compared to requiring an additional Type A test performed on the accelerated frequency specified by Section III.A.6.(b) of Appendix J to 10 CFR Part 50.
7. There is also a time and cost benefit to not performing a CILRT more frequently. The test would add two to four days (scheduled for 3.5 days) to the end of the fourth LaSalle Unit Two refuel outage (L2R04) and to complete requires approximately 1000 person-hours of work by the Technical Staff, Operating, Maintenance, and Radiation Protection departments.

SUMMARY OF CORRECTIVE ACTION PLAN

LaSalle County Station is addressing the excessive leakage found during Type B and C Local Leak Rate testing through its Corrective Action Plan (Attachment C). This plan includes an update of the corrective actions taken or scheduled to be performed for the valves specified within this attachment.

ATTACHMENT A (continued)

SUMMARY OF CORRECTIVE ACTION PLAN (continued)

IE Information Notice 85-71 provided guidance to LaSalle Station in preparing its Corrective Action Plan. The Corrective Action Plan addresses the following:

1. Specific corrective actions completed or planned on specific valves identified as problematic.
2. Alternative Leakage Test Program.
3. Development and implementation of an improved trending program for penetration and valve leakage rate performance.
4. Identification of valve type, service, and manufacturer for leakage rate performance comparison.
5. Application of engineering evaluations to develop recommendations for the improvement of test methods and their implementation or the repair, modification or replacement of problem Primary Containment Isolation Valves which have been identified as described above.

CONCLUSION

Unless an exemption from this requirement and approval of the associated proposed amendment to LaSalle Unit Two (Unit One has also been included) Technical Specifications is granted, LaSalle will be required by 10 CFR 50, Appendix J, Section III.A.6.(b) (and Technical Specification Surveillance Requirement 4.6.1.2.b) to conduct a CILRT during the next refueling outage (L2R04) scheduled to begin January 4, 1992.

As shown above, LaSalle has met the requirements for an exemption from the need for an additional CILRT. The two CILRT failures at LaSalle Unit 2 were due to the significant contribution of "as-found" Local Leak Rate Test minimum pathway leakage. The extensive Corrective Action Plan proposed in lieu of the additional test not only better implements the safety purpose of the rule but also avoids unnecessary occupational radiation exposure. The attached Corrective Action Plan also assures that Primary Containment integrity can be maintained without increasing the frequency of Type A tests. Precedent has been set by the NRC Staff granting exemptions from accelerated Type A test frequency at Palisades Plant and the Duane Arnold Energy Center. A summary and proposed Type A test schedule for LaSalle Unit 2 is provided as Attachment D. Thus, consistent with NRC requirements and practice, LaSalle Unit 2 should be granted a one-time exemption from this testing frequency.

It is requested that this exemption request and proposed Technical Specification amendment be reviewed and approved for implementation by January 31, 1992, to avoid delays and additional work during the fourth LaSalle Unit Two refuel outage beginning January 4, 1992.