

February 29, 1995

ComEd

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

SUBJECT: LaSalle County Nuclear Power Station Unit 2
Reactor Vessel Material Surveillance Program-Appendix H
Facility Operating License NPF-18
NRC Docket 50-374

REFERENCE:

- 1) D. Saccomando letter to USNRC, dated November 17, 1995, Commonwealth Edison Company's Response to NRC Generic Letter 92-01, Supplement 1: "Reactor Vessel Structural Integrity."

In accordance with Appendix H of 10 CFR 50, Commonwealth Edison Company (ComEd) is submitting the following report, GE-NE-B1301786-01, LaSalle Unit 2 RPV Surveillance Materials Testing and Analysis, Revision 0, February 1996. Section III of Appendix H, "Report of Test Results", requires a summary technical report to be submitted within one year after Reactor Vessel Material Surveillance Specimen Capsule withdrawal. The LaSalle Unit 2 300 degree azimuth location Reactor Vessel Material Surveillance Specimen Capsule was withdrawn from LaSalle Unit 2 on March 1, 1995. GE-NE-B1301786-02, Demonstration of Compliance with 10CFR50 Appendix G for the LaSalle Unit 2 Plate Material, Revision 0, February 1996, is also being submitted to demonstrate that the LaSalle Unit 2 RPV remains in compliance with 10CFR50 Appendix G and remains bounded by the Boiling Water Reactors Owners Group upper shelf energy (USE) Equivalent Margins Analysis (EMA) referred to in Reference 1.

In your review of this report the following points should be noted:

Results

For the surveillance weld metal, the measured 30 ft-lb Charpy energy transition temperature shift and USE decrease are acceptable in accordance with Regulatory Guide 1.99, Revision 2.

For the surveillance plate, sufficient initial property data in the appropriate rolling direction orientation was not available to establish a measured 30 ft-lb Charpy energy transition temperature shift and USE decrease from the surveillance data. For this reason, the attached analysis; Demonstration of Compliance with 10CFR50 Appendix G for the LaSalle Unit 2 Plate Material, was

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performed to provide conservative estimates of transition temperature shift and USE decrease. The results demonstrate compliance with 10CFR50 Appendix G requirements and show that the LaSalle Unit 2 RPV remains bounded by the EMA.

GE Surveillance Capsule Testing Corrective Actions

Chemical analysis errors were discovered in Revision 0 of the LaSalle Unit 1 - 300° surveillance capsule report (transmitted by G. Benes to USNRC letter dated March 23, 1995) and subsequently corrected in Revision 1 (transmitted by G. Benes to USNRC letter dated June 21, 1995). As a result of the errors, corrective actions were implemented by GE. To verify that the corrective actions taken by GE were effective, and to assess current GE surveillance capsule testing capabilities and performance, ComEd Supplier Evaluation Services personnel performed an audit of the GE Vallecitos and San Jose facilities. No deficiencies or problems were noted.

In addition, the GE chemical analysis results for the LaSalle Unit 2 - 300° surveillance capsule plate and weld metal specimens were independently confirmed by Argonne National Laboratory.

Conclusions

The surveillance weld and plate materials exhibit acceptable adjusted reference temperature shifts in accordance with Regulatory Guide 1.99, Revision 2. The surveillance materials also exhibit adequate USE for continued safe plant operation, and are projected to maintain an USE greater than 50 ft-lb through 32 EFPY in accordance with 10CFR50 Appendix G.

Based on the surveillance capsule results, the current 16 and 32 EFPY Technical Specification heatup and cooldown limit curves are conservative and are not required to be updated at this time.

NRC Reactor Vessel Integrity Database Summary File Comment


In the course of verifying the LaSalle Unit 2 RPV Surveillance Materials Testing and Analysis, it was determined that the initial RTNDT value for LaSalle Unit 2 weld metal 3P4966 listed on page 52 of the NRC Reactor Vessel Integrity Database (RVID) Summary File for PTS (which was included as part of the Reference 1 ComEd response) should be -6°F rather than the listed -26°F. Initial RTNDT values for 3P4966 were established by the RPV manufacturer, Chicago Bridge and Iron, for the single and tandem submerged arc welding processes.

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Fabrication records do not indicate which of the processes was utilized, so the bounding value of -6°F established for the tandem arc process rather than the -26°F established for the single arc process should be indicated in the RVID. All other beltline weld values of initial RTNDT listed in the RVID for LaSalle Unit 2 were confirmed to be bounding. All previous evaluations of operating Pressure-Temperature limits for LaSalle Unit 2 have utilized the conservative bounding value of -6°F for weld metal 3P4966, and therefore do not need to be updated.

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

Very truly yours,



Gary G. Benes
Nuclear Licensing Administrator

Attachments:

GE-NE-B1301786-01, LaSalle Unit 2 RPV Surveillance Materials Testing and Analysis, Revision 0, February 1996.

GE-NE-B1301786-02, Demonstration of Compliance with 10CFR50 Appendix G for the LaSalle Unit 2 Plate Material, Revision 0, February 1996.

cc: H. J. Miller, Regional Administrator - RIII
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