UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)					
UNION ELECTRIC COMPANY	Docket	No.	STN	50-483	OL
(Callaway Plant, Unit 1))					

AFFIDAVIT OF JOSEPH V. LAUX IN SUPPORT OF APPLICANT'S MOTION FOR SUMMARY DISPOSITION OF JOINT INTERVENORS' CONTENTION NO. II.A.1 (SA-358 PIPING)

County of Callaway) : ss State of Missouri)

JOSEPH V. LAUX, being duly sworn, deposes and says as follows:

1. I am the Supervising Engineer, OA Construction, Union Electric Company, at the Callaway Plant. My business address is P.O. Box 108, Fulton. Missouri 65251. A summary of my professional qualifications and experience is attached hereto as Exhibit "A." I have personal knowledge of the matters stated herein and believe them to be true and correct. I make this Affidavit in support of Applicant's Motion for Summary Disposition of Joint Intervenors Contention No. II.A.1 (SA-358 Piping) in this proceeding.

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2. Daniel International Corporation is the constructor for the Callaway Plant. The function of Union Electric Company's QA Construction staff at the site is to perform audits, surveillance and reviews in order to verify compliance with, and determine the effectiveness of, the quality assurance program as implemented by Union Electric Co. and Daniel International Corporation on the Callaway site.

3. The internal weld surface irregularity in the SA-358 pipe which is the subject of Joint Intervenors' Cont ntion No. II.A.1 was first brought to Daniel Quality Control's attention on April 26, 1979, by a Daniel pipefilter. The pipefitter was in the process of preliminary work on the spool piece, prior to fit-up for welding, when he observed the internal weld surface and notified a Daniel inspector. The Daniel inspector observed the irregularity and a pipe ovality condition/possible thin wall condition. The inspector requested an ultra-sonic test (UT) be performed to determine if the oval appearance was emblematic of a thin wall condition. The UT results did confirm the suspected thin wall area and a nonconformance report (NCR) was issued by the inspector on April 27, 1979. A OC "Hold Tag" was also applied to the spool piece. The inspector also requested a conference with his supervisor for the purpose of discussing the irregular weld condition and how to describe it on an NCR. On the next working day the inspector issued the NCR describing the weld surface irregularities and applied another OC "Hold Tag."

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4. The action described above is required normal action prescribed in Daniel procedure AP-VII-02, "Nonconformance Control and Reporting," which is a Daniel Administrative procedure requiring project personnel, including craft personnel, to report nonconformances or nonconforming activities and bring them to the attention of Quality Control or Engineering personnel. The Quality Control or Engineering personnel are required to document the condition on a nonconformance report.

5. An excess weld reinforcement height of 3/16 inch was measured. The length of weld involved was approximately 6 inches, with a width of approximately 2 inches. The total weld surface area affected is 12 square inches.

6. The worst case minimum wall thickness was measured to be 0.060 inch less than allower by the Bechtel specification (0.874 inch). The thin area covered approximately 15 square inches of the pipe.

7. The 27 square-inch area of the spool piece that was affected by these defects represents 0.28 percent of the total spool piece surface area.

8. The basis for reporting defects to Bechtel, the architect/engineer, on the NCR form rather than the DR form is related to the originator's anticipated final disposition of the nonconformance. That is, items which are dispositioned "Use-As-Is" or "Repair" are NCR items. Items which will be dispositioned "Rework" or "Reject For This Use" are DR items. The philosophy is that items on NCR's may be different than design criteria and as such require design agency concurrence; items on DR's do not conflict with design criteria and do not require design agency concurrence.

9. The "overlap" and excess weld reinforcement were repaired by simple removal of the excess material by localized grinding. The remaining material was then inspected for proper fusion and sound weld metal, by visual and liquid penetrant inspection, and for acceptable wall thickness by ultrasonic inspection.

10. There are no adverse implications due to length of time between discovery and repair of the subject weld. The time lapse between detection and repair is merely a factor of scheduling and adjusting to changing priorities at any given time. Craft availability, sequencing of construction operations, and preparation and processing of work instructions are a few of the elements (subject to changes) that impact the scheduling of rework/repairs.

11. The following inspections or tests were performed after the repair was made:

- A. Visual and liquid penetrant inspection to determine proper fusion and soundness of weld metal, along with an ultrasonic test to assess wall thickness was performed immediately following the removal of the excess material.
- B. Liquid Penetrant examination was performed in the presence of the NRC Resident Inspector on May 2, 1980.
- C. Radiography was performed on March 20, 1981 and evaluated by Daniel inspector and a NRC

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Radiographic Interpretor.

All of the above inspections/tests identified no apparent defects were present in the repaired subject weld.

12. There is no basis, from this incident, upon which to question the effectiveness of the site QA/QC inspection programs. The defect condition would not normally have been detected at receiving inspection. The pipe spool piece assembly is received with end caps fitted in place in order to maintain the established cleanliness condition for the internal surfaces of the pipe up to the point of preparation for installation in the plant. The QA/QC program/procedures for identification and control of nonconformances were correctly followed. The system worked as intended, including the questioning and evaluation of parts/components previously accepted whenever their condition appears questionable.

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Subscribed and sworn to before me this 24 day of September, 1981.

My commission expires FEB

16, 1985

JAMES W. LINEBERRY BOTABY PUBLIC STATE OF MISSOURI COLE CO. MY COMMISSION EXPIRES FEB 16 1985

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JOSEPH V. LAUX Summary of Professional Qualifications and Experience

Education B.S. Mechanical Engineering, 1973 University of Missouri - Rolla

Experience Eight years design and construction experience as follows:

Five years nuclear power plant construction, including one year as a field piping engineer, three years as a quality assurance engineer, and one year as a supervising engineer in quality assurance. In addition I have three years experience in piping and HVAC design. All eight years include piping and mechanical areas as primary responsibilities, including welding and nondestructive examination.

My Currect position is the Supervising Engineer, QA Construction for Union Electric Co. This position includes overall responsibilities for direction of nine OA engineers and consultants in performance of audits, surveillance and reviews in order to verify compliance with and effectiveness of the Callaway OA program. I was directly involved with the NRC investigation and resolution of the SA-358 piping allegation.