

ILLINOIS POWER COMPANY



1605-L
U-0506

CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

June 18, 1982

Mr. James G. Keppler
Director, Region III
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

Clinton Power Station Unit 1
Docket No. 50-461
Construction Permit CPPR-137
Potential 10 CFR 50.55(e) Deficiency 82-02

On February 18, 1982, Illinois Power verbally informed Mr. Ken Ridgeway, NRC Region III, of a potentially reportable deficiency per 10 CFR 50.55(e) concerning the discovery of weld electrode identified as E7018 which were found to be of non-ferrous material. This initial notification was followed by an interim report dated March 18, 1982, (IP letter U-0443, W.C. Gerstner to J. Keppler), where it was anticipated that an additional ninety days would be needed to complete our investigation of the matter. Our investigation into this matter is now complete and this letter presents a final report on this subject.

The investigation into this matter was initiated as a result of two (2) flux-covered electrodes labeled E7018 which were found to contain non-ferrous material, later determined to be E309 stainless steel wire coated with iron powder/low hydrogen flux normally utilized with E7018 electrode. A STOP WORK was immediately initiated to cease all welding on site. All AIRCO E7018 electrode was withdrawn from the field and collected together with all other E7018 electrode of the same lot number on site, and was magnetically checked. All electrodes checked in this manner were found to be acceptable. Additionally, weld electrode stubs from the power block were similarly checked and no additional improperly manufactured electrodes were identified.

A verification program was implemented to determine and confirm that similar incorrect electrodes were not used in other safety related plant weldments. This verification program consisted of identifying all welds known to be welded utilizing electrode from the suspect lot, drilling a sample of these welds, and having the shavings chemically analyzed for the presence of elements indicative of stainless steel, particularly chromium and nickel. MIL STD 105D was utilized as a guide in establishing a sampling plan. The results of this program showed no indication of stainless steel material in the sample of welds chosen.

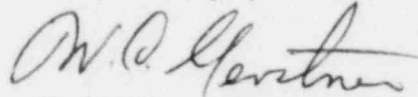
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A Quality Assurance surveillance was performed at the electrode manufacturers (AIRCO) facility to verify implementation of their Quality Assurance program. This surveillance concluded that the QA program was adequately implemented, however, recommendations were provided to AIRCO management to prevent repetition of the manufacturing defect. As an additional precaution, Baldwin Associates (Illinois Power contractor) has initiated a program to magnetically check all E7018 electrodes prior to issuance to further assure adequacy of rod.

Based on the results of the verification, testing, and checks made on the unused portion of the suspect lot of electrodes, it is concluded with a high level of confidence that no weldments at the Clinton Power Station contain stainless material which could have originated from incorrectly manufactured electrodes from the suspect lot. Subsequently, a construction deficiency as defined in 10 CFR 50.55(e) does not exist, nor is the safety of operations of the Clinton Power Station adversely affected. Therefore we conclude that the problem is not reportable per the requirements of 10 CFR 50.55(e).

Very truly yours,



W.C. Gerstner
Executive Vice President

cc: H.H. Livermore, NRC Resident Inspector
Director, Office of I&E, NRC, Washington, DC
Director-Quality Assurance
Illinois Department of Nuclear Safety