

ILLINOIS POWER COMPANY



1605-L

U-10060

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

May 31, 1983

Docket No. 50-461

Mr. James G. Keppler
Regional Administrator
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Subject: Potential Deficiency 83-06
10CFR50.55(e)
Structural Steel Welds by Rockwell Engineering

Dear Mr. Keppler:

On April 27, 1983, Illinois Power Company verbally notified Mr. F. Jablonski, U. S. NRC Region III, (ref: IP memorandum Y-17046, 1605-L, dated April 27, 1983) of a potentially reportable deficiency per 10CFR50.55(e) concerning vendor shop welding deficiencies on certain structural steel members supplied by Rockwell Engineering. Our investigation of this matter continues, and this letter represents an interim report in accordance with 10CFR50.55(e).

Statement of Potentially Reportable Deficiency

Vendor shop welding deficiencies were identified on certain structural steel members supplied by Rockwell Engineering (structural steel fabricator) to Baldwin Associates (CPS contractor) for installation at Clinton Power Station (CPS). The structural steel members in question are columns used to provide lateral support for concrete block walls at CPS. An evaluation is being performed to determine the extent of the condition and the potential for adverse impact on the safety of operations of CPS.

Background/Investigation Results

During on-site modifications to a certain block wall support column by Baldwin Associates, a deficient weld was found that was made by the structural steel fabricator. The deficient weld was one of three welds used to attach a connection angle to the column. The column was being modified per a Field Change Request (FCR 17033) which, in part, required removal of the connection angle. Inspection of the deficient weld revealed that the weld had no fusion with the base metal. An investigation was initiated to determine the scope of this problem.

8306100060 830531
PDR ADDOCK 05000461
S PDR

JUN 3 1983

IE27
110

A review of the applicable purchase order was performed and the columns received with unmodified welded connections were identified. This review identified fifty-eight (58) columns. An inspection by Baldwin Associates Technical Services was performed and found that fifty-seven (57) columns contained welding deficiencies that varied from cosmetic to structurally significant. Deviation Reports (DR) 5815 and 10303 have been generated to document the welding deficiencies identified by the inspection. One (1) column has not been inspected to date.

To evaluate the structural significance of the welding deficiencies, and to eliminate cosmetic deficiencies from the evaluation, the welds are being field ground to sound metal, and another inspection is being performed. This second inspection will provide detailed information and sketches of the remaining weld, which will form the basis for an engineering evaluation of the weld deficiencies.

An inspection of a sample of other accessible shop welds on structural steel supplied by the same vendor under different purchase orders is in-process to define the scope of the issue. Baldwin Associates Vendor Surveillance personnel are also investigating the vendor's shop procedures to determine the root causes of the welding deficiencies.

Corrective Action

1. In-process installation work on the subject columns was ceased until further investigation could be performed into this potential deficiency and repairs made to the columns.
2. Columns within the scope of this purchase order that have not been erected are being returned to the vendor for repair in accordance with approved welding procedures. Baldwin Associates Vendor Surveillance personnel will witness a representative sample of column weld inspections and repairs. For columns that have been erected, Baldwin Associates will repair the welds in accordance with approved welding procedures.
3. Where possible, Illinois Power and Baldwin Associates will constrain future orders of structural steel to stock material. Fabrication of required members will generally be performed on-site by Baldwin Associates using the stock material. This philosophy was implemented in November, 1982 and has resulted in minimum purchases of shop-fabricated structural steel assemblies.
4. Baldwin Associates Vendor Surveillance personnel are evaluating vendor shop procedures and practices to determine root causes of the welding deficiencies and corrective actions necessary to prevent recurrence.

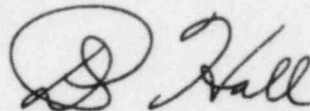
May 31, 1983

Safety Implications/Significance

Illinois Power Company's investigation of this potentially reportable deficiency is continuing. The safety implications and significance of the concerns will be assessed after inspection results are obtained and an engineering evaluation is completed. It is anticipated that approximately ninety (90) days will be necessary to file a final report on the matter.

We trust that this interim report provides you sufficient background information to perform a general assessment of this potentially reportable deficiency, and adequately describes our overall approach to resolve the problem.

Sincerely yours,



D. P. Hall
Vice President

REC/jf

cc: Manager - Quality Assurance
NRC Resident Inspector
Director - Office of I&E, USNRC, Washington, DC 20555
Illinois Department of Nuclear Safety
INPO Records Center