

ILLINOIS POWER COMPANY



1605-L  
U-10157

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

July 12, 1984

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 10CFR50.55(e) Deficiency 55-84-02  
Material Traceability

Dear Mr. Keppler:

On January 11, 1984, Illinois Power Company notified Mr. R. C. Knop, NRC Region III (ref: IP memorandum Y-18980, dated January 11, 1984) of a potentially reportable deficiency per 10CFR50.55(e) concerning material traceability at the Clinton Power Station (CPS). This initial notification was followed by one (1) interim report (ref: IP letter U-10124, D. P. Hall to J. G. Keppler dated February 14, 1984). Our investigation of this issue is continuing, and this letter represents an interim report in accordance with the requirements of 10CFR50.55(e).

#### Statement of Potentially Reportable Deficiency

A condition potentially adverse to quality was identified in the area of material traceability. This concern is based on a number of Deviation Reports (DRs), Nonconformance Reports (NCRs), and Quality Assurance audit findings, documenting problems related to identification and traceability of electrical hanger materials installed at CPS. An investigation and evaluation of this issue is being performed to determine the extent of this problem, root causes, effect on installed hardware, and significance on the safety of operation of CPS.

#### Investigation Results/Background

On December 20, 1984, Illinois Power Quality Assurance issued Management Corrective Action Request (MCAR) Number 07 to identify an adverse condition existing in the area of material traceability. The bases for issuance of MCAR 07 included:

1. The untimely resolution of Corrective Action Request (CAR) Number 073, which identified a material traceability problem. This problem was evidenced by a significant number of NCRs and DRs written to document electrical hanger support members installed with incorrect or missing material identification numbers. These incorrect or missing identification numbers resulted in the inability to verify that the installed materials were correct.
2. An Illinois Power Quality Assurance audit disclosed problems regarding adherence to procedures related to material identification and traceability.

An Investigation Plan was prepared and implemented by Illinois Power Company to investigate and address the concerns identified in the area of material identification and traceability. The plan included the following actions:

1. A review of historical data leading up to issuance of MCAR 07 has been performed to identify the scope of past material traceability problems.
2. A review of design requirements, specifications, procurement procedures, and construction procedures is being performed to evaluate adequacy of the CPS Material Traceability Program requirements and their implementation.
3. A list of specific hardware installations affected by the material traceability problem is being compiled and categorized.
4. Data collected in steps 1, 2, and 3 above is being analyzed to determine the scope, root causes, and the significance of the issue.
5. Corrective action for identified hardware/software deficiencies and their root causes is being determined and implemented.

The investigation, to date, has identified several areas where the implementation of material traceability requirements is unclear or is in question. These areas include:

1. Structural plates and shapes used in electrical supports
2. Electrical strut and strut fittings
3. Concrete expansion anchor bolts
4. ASTM A-307 bolts
5. Washer and shim stock material

## 6. ASME Subsection NF, Class 2 and 3, support materials

The problems associated with material traceability were, in part, due to the lack of clarity and consistency in the procedural requirements. These procedural deficiencies resulted in the lack of adherence to procedures.

Corrective Action (Interim)

Baldwin Associates Procedure BAP 1.5 and appropriate subtier documents have been revised to provide clarification of the traceability requirements and preclude recurrence of the material traceability problems. Changes in the procedures include the requirement that permanent plant materials, upon receipt, will be identified by hard marking or tagging. Discipline Superintendents are required to notify QC prior to subdividing materials in order to verify that traceability is maintained through installation.

Training on the enhanced procedural controls was given to all appropriate personnel, concurrent with the revision of applicable BAP procedures.

Additional corrective action taken to date include the following:

1. The majority of new materials (structural shapes, plates, struts, strut fittings, bolts, etc.) will be purchased as safety related only.
2. Laydown yards are being reorganized to clearly segregate materials.
3. Sampling and testing programs are being developed to provide assurance that the installations made prior to the implementation of the revised BA procedures have utilized materials capable of meeting design requirements.
4. The practice of marking ASME III Subsection NF, Class 2 and 3 safety related items with pink paint was discontinued. In lieu of this, items will be identified with heat numbers and RIR numbers.
5. A site purge of all non-traceable structural shapes, plates, and unmarked bolting material has been performed.

Safety Implications/Significance

Illinois Power Company's investigation of this potentially reportable deficiency is continuing. The safety implications and significance will be assessed after further background information is evaluated. It is anticipated that approximately

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six (6) additional months will be necessary to complete our investigation and to file a final report on this issue. Illinois Power intends to provide you with an update of this investigation in approximately ninety (90) days.

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 this issue.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "D. P. Hall". The signature is fluid and cursive, with the first name "D." and last name "Hall" clearly distinguishable.

D. P. Hall  
Vice President

RLC/lag

cc: NRC Resident Office  
Director, Office of I&E, US NRC, Washington, DC 20555  
Illinois Department of Nuclear Safety  
INPO Records Center