

ILLINOIS POWER COMPANY



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U-10257

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

March 21, 1985

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 55-84-01
Design Change Control (NCRs/FCRs)

Dear Mr. Keppler:

On January 11, 1984, Illinois Power Company notified Mr. R. C. Knop, NRC Region III, (ref: IP memorandum Y-18979 dated January 11, 1984) of a potentially reportable deficiency per 10CFR50.55(e) concerning the control of field design changes at Clinton Power Station (CPS). This initial notification was followed by four (4) interim reports (ref: IP letter U-10126, D. P. Hall to J. G. Keppler dated February 21, 1984; IP letter U-10160, D. P. Hall to J. G. Keppler dated June 13, 1984; IP letter U-10202, D. P. Hall to J. G. Keppler dated September 24, 1984; and IP letter U-10230, D. P. Hall to J. G. Keppler dated December 18, 1984). Our investigation of this issue is continuing, and this letter represents an interim report in accordance with the requirements of 10CFR50.55(e). Attachment A provides the details of our investigation to date.

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 issue.

Sincerely yours,

D. P. Hall
Vice President

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RLC/lr (NRC2)

Attachment

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

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ATTACHMENT A

Illinois Power Company
Clinton Power Station

Docket No. 50-461

Potential 10CFR50.55(e) Deficiency 55-84-01
Design Change Control (NCRs/FCRs)

Interim Report

Statement of Potentially Reportable Deficiency

Potential problems have been identified with the coordination and control of field-initiated design changes between Sargent & Lundy (CPS Architect/Engineer) and Baldwin Associates (CPS Constructor). The problems pertain to the revision of Field Change Requests (FCRs) and Nonconformance Reports (NCRs), their incorporation into affected design documents, and the identification of all directly affected documents on the FCRs/NCRs. An investigation and evaluation of this issue is being performed to determine the extent of this problem, effect on installed hardware, and significance to the safety of operation of CPS.

Background

As a result of Illinois Power's Quality Assurance audits, findings were written to document problems identified in the area of control of field design changes for CPS. The findings concerned procedural requirements defining the design change interface between the CPS Architect/Engineer and CPS Constructor. The specific nature of the concerns includes the following:

1. FCRs issued prior to December 1, 1983, were identified as not being posted against or incorporated into all affected design drawings. This inhibits verification of document status within the Constructor's document control system.
2. FCRs were revised and incorporated into design drawings without noting the FCR revision number on the design drawings. This inhibits verification that the FCR revision was incorporated into the design drawing.
3. The Constructor's procedures for processing revisions to change documents did not allow revision after the specific work completion and work document closure. As a result, revised FCRs and NCRs must be reviewed to ensure that the documentation and/or hardware changes were accomplished.

ATTACHMENT A
(continued)

Investigation Results/Corrective Action

Illinois Power (IP) prepared and implemented an investigation plan to determine the extent of this problem at CPS. The investigation plan included:

1. A review was performed of FCRs/NCRs issued prior to December 1, 1983, to assure that all directly affected documents associated with the field change have been properly identified,
2. A review was performed of requests for revisions to FCRs/NCRs to ensure that hardware installations were performed, where required, and that they agreed with the latest plant design,
3. Procedures used by affected organizations for the control of field design changes were reviewed for consistency and interfacing adequacy, and
4. The methods for controlling revisions to other types of design change documents, such as Field Engineering Change Notices (FECNs), were also reviewed for adequacy.

To date, approximately 30,000 FCRs/NCRs, issued prior to December 1, 1983, have been reviewed to identify directly affected design documents. Traceability was established for additional affected design documents that were not listed on the FCR/NCR in approximately 45% of the FCRs/NCRs reviewed. The newly identified affected documents are primarily due to the past practice of listing, on the FCR/NCR, only those affected documents that would be posted and incorporated. The newly identified affected design documents may not be posted or incorporated into the design document, but will be entered into the CPS Construction Management Information (CMI) and Data Management System (DMS) computer data bases for document tracking. As of November 1983, procedures required affected documents to be identified and listed on the FCR/NCR, indicating incorporation or non-incorporation. The CPS (CMI) computer data base is being utilized to maintain up-to-date information on the latest revision and incorporation status of each FCR/NCR for document control interfacing between S&L, BA, and IPC. A similar (DMS) data base, which is used by the Constructor to verify installation conformance to the latest revision of documents affecting design, is in the process of being updated with the latest information.

ATTACHMENT A (continued)

A review has also been performed of all S&L letters issued from July, 1981 to September, 1983, pertaining to S&L requests for revisions to FCRs or NCRs. This review identified 1,560 change documents which required additional Baldwin Associates action. Of these, 260 required documentation changes or field checks to verify the installations conform to the latest plant design. Forty-one new FCRs or NCRs were generated to ensure completion of action by this verification process. The practice of revising FCRs/NCRs was discontinued by Baldwin Associates. Procedural changes were developed to provide adequate guidance for correcting the disposition of a FCR/NCR which is determined to be incorrect, inadequate or incomplete.

The methods for controlling changes to other engineering/construction interface documents, such as ECNs, FECNs, and Engineering Change Packages (ECPs), were evaluated to verify that these documents are satisfactorily controlled and do not have similar problems with revisions.

Progress Summary

Since our last report, Illinois Power has reviewed the S&L committed action and is satisfied that all change documents (NCRs/FCRs) issued prior to 12/1/83, have affected design drawings identified. The directly affected documents and status of incorporation have been entered into the CPS (CMI) computer data base tracking system. The parallel DMS computer data base is currently being updated and will be verified for accuracy and completeness. Completion of the DMS tracking system will provide ready availability of this information to all site drawing stations for use by construction personnel.

During the course of resolution of the problem with processing revisions to change documents, 41 new change documents (NCRs/FCRs) were generated. S & L has provided notification that the review and/or analysis of these change documents is complete and that no significant safety concerns were identified.

Safety Implications/Significance

Illinois Power Company's investigation of this potentially reportable deficiency is continuing. The safety implications and significance will be assessed after S&L has completed their review of the directly affected design documents against the change document data base and the data base is verified. It is anticipated that approximately 45 days will be required to complete the above action and to file a final report on this issue.