

ILLINOIS POWER COMPANY



1605-L
U-10202

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

September 24, 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 55-84-01
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 two (2) interim reports (ref: IP letter U-10126, D. P. Hall to J. G. Keppler dated February 21, 1984, and IP letter U-10160, D. P. Hall to J. G. Keppler dated June 13, 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

RLC/cah (NRC2)

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, affect on installed hardware, and significance to the safety of operation of CPS.

Background

As a result of Illinois Power Company'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 were identified that were not 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 agree 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 have been reviewed to identify directly affected design documents. Additional affected design documents were identified for approximately 45% of the 30,000 FCRs/NCRs that were 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. Current procedures require all affected documents to be identified and listed on the FCR/NCR, indicating incorporation/non-incorporation. The newly identified affected design documents may not be posted or incorporated into the design document, but will be entered into the IPC computer data base for traceability. The IPC computer data base will be 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. The data base will be utilized by the Constructor to verify installation conformance to the latest revision of documents affecting design.

A review has been performed of all S&L letters issued from July, 1981 to September, 1983, pertaining to request for revision to FCRs/NCRs. Of the 1,560 change documents identified by this review, approximately 260 required documentation/field verification that affected installations conform to the latest plant design. New FCRs/NCRs were generated to ensure completion of action, where required, by the documents reviewed.

ATTACHMENT A
(continued)

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 ECPs, were evaluated to verify that these documents are satisfactorily controlled.

All FCRs/NCRs issued in the future will have the directly affected documents listed in the IP computer data base, along with the status of incorporation.

Since our last report; (1) 5,000 additional NCRs/FCRs have been reviewed for a total of approximately 30,000 documents, and all newly identified design documents have been entered into the IP computer data base (Engineering Change Tracking System) for tracking. (2) Sargent & Lundy (S&L) has completed logging into the IP computer data base the latest revision of each FCR/NCR. Baldwin Associates can now utilize this program to verify installation conformance with the design. (3) Applicable S&L and BA procedures have been revised and issued. (4) Approximately 260 change documents requiring documentation review or field verification were reviewed. Of the 260 documents reviewed, 39 have been identified as requiring evaluation for safety significance.

Safety Implications/Significance

Illinois Power Company has requested Sargent & Lundy to evaluate the 39 FCRs/NCRs identified as a result of this investigation for significance to the safety of operation of CPS. It is anticipated that approximately sixty (60) days will be necessary to complete this evaluation and to file a final report on this issue.