

ILLINOIS POWER COMPANY



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U-10263

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

April 1, 1985

Docket No. 50-461

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

Subject: Potential 10CFR50.55(e) Deficiency 55-84-11:  
Uncertified Flanges Installed in ASME Systems;  
Stainless Steel Thread-O-Lets  
Manufactured from Unqualified Stock Material

Dear Mr. Keppler:

On May 25, 1984, Illinois Power Company notified Mr. F. Jablonski, NRC Region III, (Ref: IP memorandum Y-21457 dated May 25, 1984) of a potentially reportable deficiency concerning uncertified flanges installed in ASME systems and stainless steel thread-o-lets manufactured from unqualified stock material. This initial notification was followed by three (3) interim reports (Ref. IP letter U-10172, D. P. Hall to J. G. Keppler, dated July 3, 1984; and IP letter U-10205, D. P. Hall to J. G. Keppler, dated October 18, 1984, and IP letter U-10241, D. P. Hall to J. G. Keppler dated January 18, 1985). Illinois Power's investigation of this issue is complete. Our investigation into this matter has determined that this issue does not represent a reportable deficiency under the provisions of 10CFR50.55(e). This letter is submitted as a final report in accordance with the requirements of 10CFR50.55(e). Attachment A provides the details of our investigation.

We trust that this final 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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PDR ADDOCK 05000461  
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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

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Potential 10CFR50.55(e) Deficiency 55-84-11  
Uncertified Flanges Installed in ASME Systems;  
Stainless Steel Thread-O-Lets  
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### Final Report

#### Statement of Potentially Reportable Deficiency/Background

During a review of purchase order files by Baldwin Associates Quality Assurance group, it was identified that approximately 1,035 small bore flanges were purchased without proper documentation certifying that the material met the requirements of ASME III, NA-3700/NCA-3800.

An internal review of Quality Assurance records by Gulf & Western (G&W)/Bonney Forge, a supplier to Hub, Inc., revealed that various stainless steel thread-o-lets were manufactured from stock material which was neither purchased under the provisions of ASME NCA-3800 nor did the stock material receive the product analysis for upgrading per ASME requirements.

#### Investigation Results/Corrective Action

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

1. Architect/Engineer material and design requirements found in design documents and specifications,
2. Construction Quality Control procedures and inspection basis,
3. Material procurement and receiving inspection methods,
4. The record review programs to determine capability to identify certification deficiencies, and
5. Deficiency documents (Nonconformance Reports (NCRs), audit findings, etc.) which identify certification discrepancies.

# ATTACHMENT A

(continued)

The uncertified flanges were purchased from Barr Saunders Inc. under P.O. No. C-14951 and received under Receipt Inspection Reports (RIRs) No. S-5111 and S-5635. The total quantity of flanges received was 1035 in sizes ranging from 1/2" to 2" inclusive, in ratings of 300# and 600#. Nonconformance Report (NCR) No. 70178 states that the Certified Material Test Reports (CMTRs) for these items do not indicate compliance with ASME NA-3700/NCA-3800. There was also no objective evidence that National Flange and Fitting Co. (the supplier to Barr Saunders) was an ASME Quality System Certificate holder or that they were audited by either Barr Saunders or Baldwin Associates (BA).

In order to identify those systems in which the uncertified flanges may have been installed, BA Resident Engineering (BARE) performed a review of all safety-related isometric drawings. BARE then identified the corresponding travelers containing pipe sizes between 1/2" and 2" inclusive and identified 76 flanges (with RIR No. S-5111), all of which were installed. The single item received under RIR No. S-5635 was returned to the warehouse and placed on hold.

BAQA Document Review Group (DRG) which has the responsibility of conducting a final review of all vendor - supplied and site-generated records, including Fire Protection and Augmented Class D, also identified one (1) additional safety-related installation (Ref: NCR No. 70363).

The following is a status (as determined by the above review) of the 1035 flanges received under RIRs No. S-5111 and S-5635:

Number of flanges issued to construction	253
Number installed in safety-related systems	77
Number not installed in safety-related systems	176
Total issued	253
Number of flanges on warehouse hold	782
Total flanges received	1035

ATTACHMENT A  
(Continued)

Nonconformance reports or traveler addendums were generated which replaced, with certified material, the 77 uncertified flanges installed in safety-related systems. All of the replaced flanges as well as those on hold have been scrapped (Ref: NCR 24613).

The stainless steel thread-o-lets manufactured from unqualified stock material were purchased from Hub Inc. under P.O. No. C-26876 and received under RIR No. S-12101. NCR No. 16881 identified these items as being manufactured from material that was not procured to the requirements of ASME NA-3700/NCA-3800. Of the 12 items received, 10 are currently on hold and are to be downgraded for use on Non-ASME systems, and the remaining 2 which were installed under travelers F-WF-776-A and WZ-810 are acceptable based upon jurisdictional boundaries of the Code such that NA-3700/NCA-3800 is not applicable (Ref: Nonconforming Material Report (NCMR) 1-0258 and 1-0259, respectively).

Additional corrective action taken on this issue included the issuing of Corrective Action Request (CAR) No. 147 to document and obtain resolution regarding the requirements of ASME Section III, Subsection NA-3700/NCA-3800. Training programs were conducted for personnel involved in activities associated with ASME Materials (procurement requisitions and purchase orders, vendor qualifications, document review, etc.)

Our investigation also evaluated additional deficiencies similar in nature to those associated with this issue (Ref: Referral Letter Y-20684, dated July 11, 1984). These deficiencies involved various piping fittings and plate materials (used as head fittings) installed in ASME systems for which there was no objective evidence that the fittings were manufactured or material procured under a program meeting the requirements of ASME (NA-3700/NCA-3800). NCRs were initiated to document these additional identified deficiencies. Illinois Power has performed a review/evaluation of these NCRs and has determined that the deficiencies were non-hardware in nature and therefore do not represent conditions adverse to the safety of operations of CPS. During the review it was noted that several of the NCRs referenced the use of a Potential/Unacceptable Material Log. Since this log was not proceduralized, its value, as a reference, for the purpose of closing these NCRs was questionable. Further investigation and evaluation of this matter was conducted by Corrective Action Request (CAR) No. 235. The investigation concluded that although the log should be proceduralized, it is not the primary means for assuring that proper material has been utilized, and therefore should not affect the closure of the subject investigation. As previously mentioned, the DRG performs a review of all ASME materials

## ATTACHMENT A

(Continued)

to assure that the material is correct and has no problems such as NCRs. This review is the control which assures that no unacceptable materials exist in a system.

The Potential/Unacceptable Material Log was proceduralized on March 11, 1985. Subsequent to this date, the log can be properly referenced on documents, such as NCRs, as further justification that unacceptable materials are controlled to preclude their inadvertent use.

### Root Cause

The deficiencies identified in this investigation are attributed to a lack of understanding by the Constructor of the requirements of ASME III, Subsection NA-3700/NCA-3800.

### Safety Implications/Significance

Illinois Power Company's investigation of this potentially reportable deficiency is complete. S&L was requested to perform a safety significance evaluation of the NCRs involving the subject flanges. S&L has stated that if the identified deficiencies had gone uncorrected they would not have adversely affected the safety of operations of CPS. (Ref: S&L Letter SLMI-13835). S&L has also performed an evaluation of the NCRs associated with the deficiencies similar in nature to the subject issue and concurs with Illinois Power that the deficiencies were non-hardware and do not represent a condition adverse to the safe operations of CPS (Ref: S&L Letter SLMI-15493). On this basis, the issue is considered to be not reportable under the provisions of 10CFR50.55(e).