



Illinois Power Company
Clinton Power Station
P.O. Box 678
Clinton, IL 61727
Tel 217 935-8881

U-602766
4F.190

June 20, 1997

Docket No. 50-461

Mr. A. Bill Beach
Regional Administrator
Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351

Subject: Status of Investigation into Inappropriate Use of Solder Flux as Related to Main Control Room Neon Light Socket Failures at Clinton Power Station

Dear Mr. Beach:

In our most recent letter (U-602763, dated June 19, 1997) regarding the main control room neon light socket failure issue at Clinton Power Station (CPS), Illinois Power (IP) committed to provide the status of our investigation of where inappropriate solder flux may have been used on other plant components. This letter is submitted pursuant to that commitment.

As described in our June 10, 1997 letter (IP letter U-602759), the probable cause of the neon light failures is the use of incorrect solder flux during repair and/or replacement of the neon lamp sockets in RF-6. As a bounding approach to determine the scope of other potentially affected components, IP has undertaken the task of reviewing all of the work documents from maintenance history involving soldering operations. This effort included searches based on solder and solder flux stock codes that may have been specified in applicable work documents. This effort thus far has identified 1154 work documents. Of this population, 555 are safety related, 520 are non-safety related, 3 are fire protection related, and 76 remain to be classified. To date, 288 of the original set of 1154 work documents have been completely dispositioned and will not require any further action.

Further reviews of work documents are being conducted to ensure that the list is complete. This effort will include sorting maintenance history records by other common attributes. Additional checks will be performed to confirm the scope of affected work documents.

9707020136 970620
PDR ADDOCK 05000461
P PDR

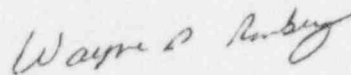


IEO11

From the work document review already completed, other safety-related components (besides the main control room neon light sockets) have been identified as potentially having the incorrect solder flux used during maintenance and are being reworked. These are the outboard containment penetration connections for Source Range Monitor "B" (1C51K600B), and eleven solid-state SS-14 trip devices associated with 480-volt circuit breakers. Additional components, as they are identified, will be evaluated and reworked as required.

Our investigation of the potential use of incorrect solder flux on components other than the main control room neon light sockets is ongoing. IP is also investigating the generic implications from the potential misuse of other consumable items. When our ongoing investigations are complete, IP will submit a follow-up letter to provide the results. Please contact me if I can be of further assistance.

Sincerely,



Wayne D. Romberg
Assistant Vice President

JFK/krk

cc: NRC Clinton Licensing Project Manager
NRC Resident Office, V-690
NRC Document Control Desk
Illinois Department of Nuclear Safety