

ILLINOIS POWER COMPANY



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

March 20, 1989

10CFR50.34

Docket No. 50-461

Document Control Desk
Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Clinton Power Station
License Condition 2.C(4), Control Systems Failure

Dear Sir:

Illinois Power Company (IP) provided the NRC with the results of a review of the control systems failures issue in letters dated December 9, 1982, April 17, 1986, May 15, 1986, July 16, 1986, and November 18, 1988. On March 9, 1989, IP and members of the NRC staff discussed the contents of these letters in a telephone conference call. During the conference call, IP discussed certain reliability improvements for the feedwater control system that were being implemented at Clinton during the first refueling outage (RF-1), and the predicted fuel response to a reduced feedwater temperature transient. The purpose of this letter is to provide in writing the additional technical information which was discussed on March 9, 1989. This information should aid the NRC staff in closure of License Condition 2.C(4), Control Systems Failure.

IP is providing the information requested by your Mr. J. Hickman, NRC Clinton Project Manager, in Attachments 1 and 2 of this letter. Attachment 1 is a description of the feedwater control system reliability improvements, to be implemented in RF-1, and Attachment 2 is a proprietary copy of the predicted fuel response to a reduced feedwater temperature transient event. In accordance with 10CFR2.790, IP has identified the information in Attachment 2 as proprietary to General Electric, therefore, it is exempt from disclosure.

Based on the discussion held March 9, 1989, and on the additional information contained herein, it is IP's understanding that the Staff has sufficient information for closure of License Condition 2.C(4). If you have any questions or require additional information, please contact me.

Sincerely yours,

A handwritten signature in cursive script that reads "D. L. Holtzsch".

D. L. Holtzsch
Acting Manager -
Licensing and Safety

U- 601403
L30-89(03-20)-LP
8E.100c

RFP/pgc

Attachments

cc: NRC Resident Office
NRC Regional Administrator, Region III
NRC Clinton Licensing Project Manager
Illinois Department of Nuclear Safety

Attachment 1

Feedwater Control System
Reliability Improvements

1. A design change will be implemented prior to startup from the first refueling outage (RF-1) to increase the indicating range of feedwater temperature inputs to the Main Control Room.
2. A design change will be implemented prior to the end of RF-1 to change the fuse coordination between the fuses to the 48VDC power supplies (panel 1PA08J) and the fuses on the branch circuits loads of the 48VDC power supplies.
3. A design change will be implemented prior to the end of RF-1 to raise the level trip setpoint for the extraction steam valves from approximately +6.5 inches to approximately +16 inches to allow level transient to be mitigated by automatic and operator actions prior to isolating the extraction steam flow to the heater drains.
4. During Power Ascension following RF-1, the control valves in the heater drain system will be tuned to ensure their transient response is correctly adjusted.

It is believed that these actions will significantly increase the reliability of the heater drain system such that IP can achieve the goal of only one transient in 20 years. By assuring the reliability of the design, the General Electric design basis continues to be applicable and requires no change.

