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P04-85(02-01)-L  
N33-85(02-01)-L  
1A.120

ILLINOIS POWER COMPANY



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

February 1, 1985

Docket No. 50-461

Director of Nuclear Reactor Regulation  
Attention: Mr. A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Subject: Clinton Power Station (CPS) Unit 1  
Automatic Depressurization System Actuation Logic  
(SER Confirmatory Issue # 28)

Dear Mr. Schwencer:

This is in response to a request from the NRC Staff regarding clarification of Appendix D, TMI Action Plan Item II.K.3.18 of the Clinton Power Station (CPS) Final Safety Analysis Report (FSAR).

The following clarifies our response to Item II.K.3.18. The high drywell pressure portion of the logic circuit is bypassed and the Automatic Depressurization System (ADS) initiates on the low reactor pressure vessel (RPV) water level (Level 1) signal alone, when the "bypass" timer and the 105 second timer are out. A time delay of six minutes for the high drywell pressure bypass logic was chosen, consistent with the calculated analytic limit. The detailed analysis performed was based upon:

1. Avoidance of excessive fuel cladding heatup using 10CFR50 Appendix K models and the most limiting transient as described in Figure 6.3-72 of the CPS FSAR Section 6.3.3 (assumes no operator action).
2. Providing sufficient time to allow recovery of the RPV water level above Level 1 during an ATWS event.

Following receipt of Level 1 signal and once the bypass timer and the system level timer times out, the ADS initiation is sealed in and the system does not automatically reset. For additional information see CPS FSAR Section 7.3.1.1.1.4.

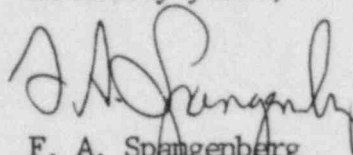
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It is our understanding that the above information provides the clarification requested by the NRC Staff regarding TMI Item II.K.3.18. required to close SER Confirmatory Issue # 28. The CPS FSAR Appendix D will be revised to reflect the above clarification.

Sincerely yours,



F. A. Spangenberg  
Director - Nuclear Licensing  
and Configuration  
Nuclear Station Engineering

TLG/ljs

cc: B. L. Siegel, NRC Clinton Licensing Project Manager  
NRC Resident Office  
Regional Administrator, Region III USNRC  
Illinois Department of Nuclear Safety