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ILLINOIS POWER COMPANY

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

February 5, 1986

Docket No. 50-461

Director of Nuclear Reactor Regulation
Attention: Dr. W. R. Butler, Director
BWR Project Directorate No. 4
Division of BWR Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Clinton Power Station
Evaluation of Postulated Jet
Impingement on Drywell Grating

Dear Dr. Butler:

The postulated high energy pipe breaks inside the drywell have been reviewed for jet impingement effects on grating. This evaluation has identified that two postulated breaks will produce direct jet forces perpendicular to the grating. The resultant hypothesized displacement of the grating has been reviewed in detail for these two cases by field walkdown and drawing review. This review has identified significant congestion (structures, piping, etc.) within this postulated jet path for the displaced grating. It is concluded that grating will not be displaced beyond the jet impingement zones due to these obstructions. The jet impingement analyses have confirmed that safe shutdown is assured by conservatively assuming loss of function of the components within each postulated jet zone.

The other postulated break locations have either no grating within the jet impingement zone, or the grating is parallel with the jet flow direction (jet force will not act upon significant projected area of the grating).

If you should have any questions on the information provided, please contact us.

Sincerely yours,

F. A. Spangenberg
Manager - Licensing and Safety

DWW/ckc

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

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