

Illinois Power Company

U-0607
L30-83(03-04)6

500 SOUTH 27TH STREET, P. O. BOX 511, DECATUR, ILLINOIS 62525-1805

Docket No. 50-461

March 4, 1983

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 Unit 1
SER Confirmatory Issue #7

Dear Mr. Schwencer:

As requested by the NRC staff in a meeting on March 8, 1982, and as a fulfillment of SER confirmatory issue #7, the attached report on CPS "Masonry Block Wall Tests" is submitted. This report provides the results of a confirmatory test program undertaken by Illinois Power Company for the CPS Masonry Walls. The tests were witnessed by NRC Structural Engineering Branch personnel, N. Chokshi, F. Schauer, and K. C. Leu.

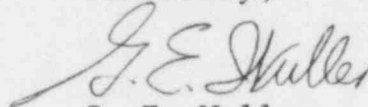
The conclusion of the testing program is that the average modulus of rupture value for the Clinton masonry walls is 251 psi based on three tests. As presented to the NRC staff in the March 8, 1982 meeting, the maximum allowable tensile stress parallel to the bed joint for the Clinton masonry wall design is limited to 77 psi for SSE load combinations (4% damping). The actual masonry stress is limited to only 36 psi. Even when the truss bar reinforcing is ignored and the damping value is lowered to 2%, the actual maximum SSE tensile stress is less than 65 psi, as documented in Illinois Power Co. letter U-0469 to Mr. J. R. Miller of NRC staff, dated April 23, 1982. Based on these low stresses and the high modulus of rupture values obtained from the test, it is evident that the design stresses for the Clinton masonry wall design are quite conservative and have an ample margin of safety, i.e., more than a factor of three over

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SSE stresses. Therefore, we believe that confirmatory issue #7 is satisfactorily resolved for close out in the next SER Supplement. Your concurrence after an early review of this report is kindly requested.

Sincerely,



G. E. Wuller
Supervisor - Licensing
Nuclear Station Engineering

HBP/jmm

attachment

cc: Dr. H. Abelson, NRC Clinton Project Manager
Mr. N. Chokshi, NRC SEB
Mr. H. H. Livermore, NRC Resident Inspector
Illinois Department of Nuclear Safety

construction technology laboratories

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