ILLINOIS POWER COMPANY



U-0580 L30-82(12-09)-6 500 SOUTH 27TH STREET, DECATUR, ILLINOIS 62525

December 9, 1982

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

Dear Mr. Schwencer:

Clinton Power Station Unit 1 Docket No 50-461 Outstanding Issues No. 14 & 15

Attached is a copy of the report, prepared for Illinois Power (IP) by the Quadrex Corporation, regarding Outstanding Issues 14 & 15 of the Clinton Power Station Safety Evaluation Report (CPS-SER); NUREG-0853.

Outstanding Issue #14 is entitled "Capability for Safe Shutdown Following Loss of a Bus Supplying Power to Instruments and Controls". The staff requested that Illinois Power review the adequacy of emergency operating procedures to be used to obtain safe shutdown upon a loss of any Class 1E or non-lE bus supplying power to safety- or non-safety related instruments and controls. This issue was addressed for operating reactors through IE Bulletin 79-27 (Nov. 1979). The results of this review indicate that the existing procedures are adequate to meet the safe shutdown requirements with the loss of bus power. No effects on the ability to achieve a cold shutdown condition were noted, thus no modifications to existing instument and control systems are necessary. A Quadrex recommendation to provide alarms and/or indications in the main control room to alert the operator to the loss of power to each bus is presently being evaluated by IP.

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Outstanding Issue #15 is entitled "Effects of Control Systems Failures". The Staff requested that IP identify any power sources, sensors, or sensor impulse lines which provide power or signals to two or more control systems and demonstrate that failure of these power sources, sensors, or impulse lines will not result in consequences outside the bounds of the FSAR Chapter 15 analyses or beyond the capability of operators or safety systems. In addition, IP was requested to review the designs to determine whether harsh environments associated with high-energy line breaks might cause control system malfunctions resulting in consequences more severe than those analyzed in the FSAR Chapter 15 or beyond the capability of operators or safety systems. This was addressed by IE Information Notice 79-22 issued September 1979. The results of this review indicate that the Chapter 15 events are bounding as described and that all safety criteria are met in spite of the postulated failures. Therefore, no design modifications were found necessary as a result of this review.

In summary, IP believes that these results meet the intent of the investigations required by IE Bulletin 79-27 and IE Notice 79-22 and that no design modifications are required, at this time.

We would appreciate your review of these analyses at your earliest convenience so that these issues can be closed in the next supplement to the CPS-SER.

Sincerely,

G. E. Wuller

Supervisor-Licensing Nuclear Station Engineering

TLR/1t

cc: H. Abelson, NRC Clinton Project Manager
H. H. Livermore, NRC Resident Inspector
Rick Kendall, NRC Instrumentation and Control Systems Branch
Illinois Dept. of Nuclear Safety