



Commonwealth Edison  
1400 Opus Place  
Downers Grove, Illinois 60515

January 20, 1995

Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Document Control Desk

Subject: Byron Nuclear Power Station, Unit 1  
Residual Heat Removal (RHR) Heat Exchanger (HX) Nozzle to  
Vessel Welds Inservice Inspection Results  
NRC Docket No. STN 50-454

- References: 1. Teleconference between Commonwealth Edison Company (ComEd) and the Nuclear Regulatory Commission (NRC) held on January 16, 1995 regarding Byron and Braidwood Stations, Units 1 and 2, RHR HX Nozzle to Vessel Weld Inservice Inspections
2. Robert M. Pulsifer (NRC) letter to Thomas J. Kovach (ComEd) dated November 21, 1991 transmitting the Safety Evaluation Report (SER) for the Braidwood Station, Unit 2, RHR HX Nozzle to Vessel Welds Fracture Mechanics Analysis

The purpose of this letter is to transmit the results of the last ASME Section XI Inservice Inspection of the Byron Unit 1 RHR HX Nozzle to Vessel Welds as requested in Reference 1. These inspections were conducted during the Byron Unit 1 Cycle 5 Refuel Outage (B1R05) which began February 5, 1993, and concluded April 10, 1993.

During these inspections, ultrasonic reflectors greater than those allowable by ASME Section XI Subarticle IWB-3500 were detected. These indications were subsequently evaluated using fracture mechanics analysis performed in accordance with ASME Section XI Subarticle IWB-3600 and determined to be acceptable. The fracture mechanics analysis that was used is documented in Westinghouse Letter Report MMDT-SMT-062(32), Fracture Mechanics Evaluation Byron and Braidwood Units 1 and 2 Residual Heat Exchanger Tube Side Inlet and Outlet Nozzles. The methodology outlined in this report has been previously reviewed and approved by the Staff (See Reference 2).

January 20, 1995

As shown in the enclosure, all indications fall within ASME Section XI acceptance standards in Subarticles IWB-3500 and IWB-3600. Those indications determined to be acceptable through the fracture mechanics analysis will be monitored by examinations during future Byron Unit 1 outages as required by ASME Section XI, IWC-2420.

Please address any further comments or questions regarding this matter to this office.

Sincerely,



Harold D. Pontious, Jr.  
Nuclear Licensing Administrator

Enclosure

cc: J. B. Martin, Regional Administrator - Region III  
H. Peterson, Senior Resident Inspector - Byron  
G. F. Dick Jr., Byron Project Manager - NRR  
Office of Nuclear Facility Safety - IDNS