Commonwealth Edison Company
1400 Opus Place
Downers Grove, IL 60515

October 23, 1995

ComEd

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

Attn: Document Control Desk

Subject: Teleconference between Commonwealth Edison Company and the Nuclear Regulatory Commission dated October 18, 1995, regarding the Increase in the Interim Plugging Criteria for Byron Unit 1 and Braidwood Unit 1 Steam Generators
NRC Docket Numbers:50-454 and 50-456

Reference: Teleconference between the Nuclear Regulatory Commission and the Commonwealth Edison Company dated October 18, 1995

In the Reference teleconference the Nuclear Regulatory Commission (NRC) discussed several items with the Commonwealth Edison Company (ComEd) pertaining to the request to increase the interim plugging criteria for Braidwood Unit 1 and Byron Unit 1 steam generators. The conversation focused on clarification of items previously docketed. Attached clarifies the remaining items.

Please address any comments to this office.

Sincerely,

Denise M. Saccomando
Senior Nuclear Licensing Administrator

Attachment

cc: D. Lynch, Senior Project Manager-NRR
R. Assa, Braidwood Project Manager-NRR
G. Dick, Byron Project Manager-NRR
S. Ray, Senior Resident Inspector-Braidwood
H. Peterson, Senior Resident Inspector-Byron
H. Miller, Regional Administrator-RIII
Office of Nuclear Safety-IDNS

K:nla\bybwd\stgen\ipcres4

A001
1/1

ATTACHMENT

Byron Unit 1 Cycle 8 Length

The length of Byron Unit 1 Cycle 8 is estimated to be 1.186 Effective Full Power Years. Cycle 8 is currently scheduled to begin on May 13, 1996, following the B1R07 refuel outage, and to end on September 9, 1997, for the start of B1R08 refuel outage. Table 1 from the October 11, 1995, ComEd listed the Byron Unit 1 and Braidwood Unit 1 growth rates and cycle lengths. This table has been revised to include the estimated length of Unit 1 Cycle 8 and is attached as Table 1.

Fractional Indications in Voltage Distribution

The voltage distribution used for the Byron Unit 1 and Braidwood Unit 1 leakage and burst probability analyses for the next operating cycle will include all the indications left in service for which the rotating pancake coil (RPC) did not detect degradation (NDD). Therefore, the fraction of RPC NDD indications left in service will be 1.0.

Cold Leg Indication Experience

Table 2 provides a summary of ODSCC at cold-leg intersections at Braidwood Unit 1 and Byron Unit 1. A minimal number of cold-leg indications were indentified in the last three Braidwood Unit 1 inspections (5, 10, and 18 indications). The average voltage for each inspection was approximately 0.5 volts, with a maximum voltage of 1.01 volt or less.

To date, Byron Unit 1 has not experienced ODSCC at cold-leg intersections.

Mid-Cycle Equation for Unscheduled Outages

For unscheduled mid-cycle steam generator eddy current inspections, the interim plugging criteria (IPC) voltage repair limits are determined by equations specified in proposed Technical Specification 4.4.5.4.a.11.f. This specification requires hot-leg indications be repaired to the 3.0 volt IPC limits and cold-leg indications be repaired to limits determined by the given upper and lower voltage repair limit equations. As discussed in the September 1, 1995, 3.0 volt IPC License Amendment Request and in the October 11, 1995 transmittal regarding the October 3 and 4, 1995 teleconference, hot-leg indications at tube support plates that are adjacent to intersections that cannot pass a 0.610 inch diameter probe are to be repaired to the criteria that applies to the cold-leg (i.e., 1.0 volt IPC in accordance with Generic Letter 95-05). Therefore, the voltage repair limits for these indications during unscheduled mid-cycle inspections will be determined by the mid-cycle equations specified in proposed Technical Specification 4.4.5.4.a.11.f.

Cold-Leg Growth Rate Distribution

The growth rate to be applied to the cold-leg indications (including hot-leg indications for which the 1.0 volt repair limit is applicable) will be developed as a bounding growth rate for the cold-leg indications. If, as expected, there is no significant dependence of growth on tube support plate (TSP) elevation or a decrease in growth with elevation, the combined growth distribution for all hot-leg and cold-leg indications is a conservative growth for the cold-leg indications. If an increasing dependence of growth on TSP elevation is found, such that the cold-leg indications have a larger growth rate than the combined population of indications, a conservative bounding subset of the total growth distribution will be used for the cold-leg indications.

TABLE 1:
BYRON/BRAIDWOOD UNIT 1
CYCLE LENGTHS AND GROWTH RATES

	Cycle	Outage	EFPY	Cycle Length (EFPY)	Maximum Gowth (Volts/EFPY)	Average Growth (Volts/EFPY)	Comment
Byron Unit 1	Cycle 5	B1R05	5.671	1.127	2.13	0.28	
	Cycle 6	B1R06	6.949	1.278	7.72	0.25	
	Cycle 7A	B1P02	7.816 est.	0.867 est.	*	*	10/22/95 Outage Start
	Cycle 7B	B1R07	8.134 est.	0.318 est.	*	*	4/96 Outage Start
	Cycle 8	B1R08	9.32 est.	1.186 est.	*	*	9/97 Outage Start
Braidwood Unit 1	Cycle 4	A1R04	4.302	1.147	8.51	0.23	
	Cycle 5A	A1M05	5.016	0.714	5.77	0.4	
	Cycle 5B	A1R05	5.522	0.506	*	*	9/29/95 Outage Start
	Cycle 6	A1R06	6.732 est	1.21est.	*	*	3/97 Outage Start

* Future Inspection - Data not available

TABLE 2:
BRAIDWOOD/BYRON COLD-LEG INDICATIONS

Station	Date	Outage	Number of Cold-Leg Bobbin ODSCC	Bobbin Voltage Range	Average Bobbin Voltage	Number RPC Inspected	Number RPC Confirmed
Braidwood Unit 1	Mar-94	A1R04	5	0.3 - 0.88	0.48	5	0
	Feb-95	A1M05	10	0.27 - 0.94	0.54	10	2
	Oct-95	A1R05	18	0.26 - 1.01	0.48	1	0
Byron Unit 1	Jan-87 thru Oct-94	B1R01 thru B1R06	None Found To Date				