



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

January 24, 1992

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attn: Document Control Desk

Subject: Commonwealth Edison Response to Generic Letter
91-11 for Byron and Braidwood Stations

Byron Units 1 and 2,
NRC Docket Numbers 50-454 and 50-455

Braidwood Units 1 and 2,
NRC Docket Numbers 50-456 and 50-457

Reference: Generic Letter 91-11, "Resolution of Generic Issues 48,
LCO's for Class 1E Vital Instrument Buses, and 49,
interlocks and LCOs for Class 1E Tie Breakers",
dated July 18, 1991

Dear Dr. Murley:

Generic Letter 91-11 was issued as part of the resolution of Generic Issues 128, "Electrical Power Reliability". The Generic Issues (GI-48 and GI-49) addressed by this letter involve vital AC buses and tie breakers. Specifically, the Generic Letter recommends that nuclear plants ensure that procedures are in place that include time limitations and surveillance requirements for; vital instrument buses (VIBs), inverters to VIBs and tie breakers that can connect redundant Class 1E buses (AC or DC) at one unit or that can connect Class 1E buses between units at the same site.

Commonwealth Edison (CECo) has reviewed Generic Letter 91-11 and has determined that Byron and Braidwood Stations are in compliance with the Letter's recommendations.

9201310240 920124
PDR ADDCK 05000454
P PDR

A027
1/0

The Technical Specifications for Byron and Braidwood were written using the Westinghouse Standard Technical Specifications (STS), NUREG-0452, Draft Revision 5, as a guide. The NRC has recognized that the concerns of this Generic Letter are addressed by these STS. Since Byron and Braidwood Stations have LCOs and Surveillance requirements that closely follow the STS for VIBs and tie-breakers, CECO believes Byron and Braidwood stations fully comply with the recommendations of Generic Letter 91-11.

The following evaluates the Generic Letter issues against Byron's and Braidwood's Class 1E AC and DC electrical distribution system.

Vital Instrument Buses (VIBs) and Inverters or Other Onsite Power Sources to the VIBs

Byron and Braidwood Stations have four 120 volt AC VIBs per unit. Each of these buses is required, by Technical Specifications, to be energized from its associated inverter connected to a DC bus. The Specifications do not allow continued power operation if one of the vital instrument buses or inverters is inoperable. The allowed outage time for the instrument buses and inverters is two hours. If they are not restored, Technical Specifications require the reactor to be in HOT STANDBY within the next six hours.

In addition, Technical Specifications indicate which inverters must energize each of the vital buses. Technical Specification surveillance requirements assure that specified buses are determined to be energized in the required manner. This determination is made at least once per seven days.

Tie Breakers Connecting Common Unit 1E Buses (AC or DC)

The Class 1E safety-related AC and DC electrical distribution systems at Byron and Braidwood do not have tie breakers that can connect common unit 1E buses.

Tie Breakers Connecting Unit 1E Buses (AC or DC) Between Units

Byron/Braidwood Technical Specifications section 3/4.8.2.1 establishes the LCOs and surveillance for cross-tying DC power sources between units. Typically, the allowed outage time for the cross-tie is two hours. However, if a shutdown unit (Modes 5 or 6) has an inoperable DC bus cross-tied to the operating unit's bus the LCO is seven days. This LCO is permitted only if the loads on the affected bus are limited.

For AC power sources, Specifications 3/4.8.3.1, for Modes 1 through 4, and 3/4.8.3.2, for Modes 5 and 6, address 480 Class 1E buses. These buses do not have cross-tie breakers between units. Specification 3.8.1.1 allows cross-tying the 1E 4160 volt buses to the opposite unit's System Auxiliary Transformer bank. No other cross-ties between unit's 1E buses are possible.

Based on the above information, CECo concludes that Byron and Braidwood Technical Specifications for AC and DC distribution systems provide controls that assure the recommendations of Generic Letter 91-11 are met.

To the best of my knowledge and belief, the statements contained in this document are true and correct. In some respect these statements are not based on my personal knowledge, but on information furnished by other CECo employees, contractor employees, and consultants. Such information has been reviewed in accordance with Company practice, and I believe it to be reliable.

If there are any questions or comments, please contact me at (708) 515-7292.

Sincerely,



David J. Chrzanowski
Nuclear Licensing Administrator
Generic Issues

- cc: A. Bert Davis, Regional Administrator-RIII
- R. Pulsifer, Project Manager-NRR/PDIII-2
- A. Hsia, Project Manager-NRR/PDIII-2
- R. Elliott, Project Engineer-NRR/PDIII-2
- S. Dupont, Senior Resident Inspector-Braidwood
- W. Kropp, Senior Resident Inspector-Byron

State of Ill County of Cook
 Signed before me on this 24th
 of January, 19 92, by [Signature]
 Notary Public [Signature]

