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September 25, 1995

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

Attention:

Document Control Desk

SUBJECT:

Braidwood Station Status Update on Resolution of Thermo-Lag (GL92-08)

Issues

REFERENCES:

Braidwood Letter dated March 28, 1995, "Braidwood Station Response to Request for Additional Information Regarding Generic Letter 92-08, Thermo-

Lag Fire Barriers Pursuant to 10 CFR 50.54(f)"

The purpose of this letter is to provide the NRC with an update on the status of resolving the Thermo-Lag issue (Generic Letter 92-08) at Braidwood Station. In the December 1994 ComEd response to the Request for Additional Information concerning GL 92-08, Braidwood Station indicated that most of the existing Thermo-Lag material would be replaced with a qualified fire barrier. In March 1995, the reference letter informed the NRC that Braidwood and Byron Stations were re-evaluating the corrective action previously specified for cable trays and conduits protected with Thermo-Lag material. The re-evaluation described in the reference letter is now complete and a new plan of corrective action has been developed, which replaced the corrective actions described in the December 1994 submittal. The plan of corrective actions being implements is described below. The original Braidwood commitment to complete the resolution of the GL 92-08 issues by the end of 1996 remains in effect with the new plan of corrective actions.

The current plan of corrective actions being implemented at Braidwood Station uses two methods of resolution:

1. Reducing the population of cables requiring protection (Safe Shutdown cables) via Engineering analysis.

2. Re-routing of the reduced population of Safe Shutdown cables such that redundant

safe shutdown trains are not located in the same fire zone.

At Braidwood Station, there were originally 121 cables protected with fire barrier material in order to achieve compliance with 10 CFR 50 Appendix R. Braidwood primarily utilized TSI 330-1 material for Unit One and 3M Interam material for Unit Two. For the 62 cables installed in Unit One, 19 cables will be rerouted which will eliminate the need for barriers on these cables and an additional 5 cables. The remaining 38 cables will be resolved via Engineering analysis. The analysis will show that these cables are not required for the Safe Shutdown of the unit. For the 59 cables installed in Unit Two, 12 cables will be rerouted, 9 will continue to be protected with the 3M Interam fire barrier as currently installed, 2 cables will be resolved by rewiring circuits and the remaining 36 cables will be accepted as-is via Engineering analysis.

The cables that are being re-routed will be located such that cables associated with redundant trains of equipment required for Safe Shutdown (and associated support equipment) are not located in the same zone. Therefore, one train of Safe Shutdown equipment will always be available after a fire in any fire zone. Some deviations from Appendix R will be required with this solution. In some cases, walls and floors separating fire zones do not carry a fire rating of 3 hours, although they are of 3 hour construction. Preliminary evaluations show that the required deviations from Appendix R can be prepared and evaluated in accordance with 10 CFR 50.59 in CUU58

an acceptable r anner, consistent with deviations previously approved by NRC staff. These are to be submitted in a future Fire Protection Report Amendment to justify the use of non fire-rated floors and walls.

The reroute project has been separated into three groups:

- 1. Unit 1 refuel outage installation (A1R05)
- 2. Unit 2 refuel outage installation (A2R05)
- 3. Work not requiring a refuel outage.

Physical work to support the Unit 1A1R05 refuel outage installation has begun. After A1R05 is complete, the Station will begin support work for the Unit 2 A2R05 refuel outage installation. After A2R05, the remaining physical work will be completed prior to the end of 1996 as per our current commitment.

Note that the final resolution of some of the cables no longer necessary for Safe Shutdown will be achieved after the approval of Improved Technical Specifications (iTS). In May 1995, ComEd informed the NRC staff that Braidwood Station has put in motion the actions to convert the current Technical Specifications to the ITS. As part of this effort, evaluations are being performed regarding the function of certain pieces of equipment to support ITS. These evaluations provide the basis to exclude the cables associated with the equipment that is not necessary for Safe Shutdown. The approval of the ITS is expected sometime in 1997. Specifically, this approach will be used to resolve the cables for the CV pump room cubicle coolers. In the interim period, necessary compensatory measure will remain in effect.

There is no additional physical work required for the cables that are no longer required for Safe Shutdown. These cables will remain as currently routed. The Engineering re-analysis will be appropriately documented.

Existing Thermo-Lag barriers will be abandoned in place unless removal is required for other reasons. Fire loading associated with the TSI material will be included in the combustible loading for zones in which it is located.

Braidwood Station intends to resolve the Thermo-Lag (GL 92-08) issues by the end of 1996, as discussed above, to meet its commitment. If the described actions or schedule change, an update will be provided in a timely manner.

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