



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

March 23, 1992

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20005
ATTN: Document Control Desk

Subject: Braidwood Station Units 1 and 2
Inservice Testing Program for Pumps and Valves
Supplemental Response to Revision 4 Safety Evaluation Report
NRC Docket Nos. 50-456 and 50-457

References: (a) February 10, 1992 T.W. Simpkin letter to Dr. T.E. Murley

Dear Dr. Murley:

Reference (a) transmitted Commonwealth Edison's response to several open items identified in the NRC's Safety Evaluation Report for Revision 4 of the Braidwood Inservice Testing program. The purpose of this letter is to provide supplemental information to address valve relief request VR-02, addressing the check valves in the NaOH supply line to the Containment Spray System.

Provided in the attachment to this letter is a revised relief request, providing additional justification to support the requested relief.

Please address any questions you may have regarding this matter to this office.

Respectfully,

Terrence W. Simpkin
T.W. Simpkin
Nuclear Licensing Administrator

Attachment: Revised VR-02 Relief Request

cc: R.M. Pulsifer - Project Manager, NRR (w/attachments)
Resident Inspector - Braidwood (w/o att)
B. Clayton - Region III (w/o att)

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RELIEF REQUEST VR-2

1. Valve Number:

1CS020A	2CS020A
1CS020B	2CS020B
2. Number of Items: 4
3. ASME Code Category: C
4. ASME Code, Section XI Requirements:

Exercise check valves to the position required to fulfill their function (Ct/Open; Bt/Closed) quarterly, unless such operation is not practical during plant operation per IWV-3521, or exercise during cold shutdown per IWV-3522.

5. Basis for Relief:

These check valves in the spray additive system (CS) cannot be stroked without introducing NaOH into the CS system, unless the piping between the NaOH storage tank and the injection isolation valves, 1/2CS021A/B, is drained and flushed of the highly caustic effluent. The effluent is drained into containers, which amounts to almost two 55 gallon drums of potentially (radioactive/toxic) mixed waste that requires either recycling or disposal. Then, primary water is connected to the CS system and is used to flow test the line to ensure that the proper Technical Specification eductor flow rate can be passed, via special test connections.

Disposal of the caustic is difficult if it is slightly contaminated as well as having a high pH. Reuse of the drained NaOH is not always possible because the caustic has been contained in a stagnant line (up to five years) and may not meet chemistry requirements. Thus storage of hazardous mixed waste can become very costly. This is due to the non-existence of commercial disposal facilities for mixed waste, which means that any mixed waste generated would have to be stored on-site. Also, the draining and handling of this highly caustic material poses a significant hazard to personnel, with the potential for loss of eye sight and/or chemical burns, if mishandled.

6. Alternate Testing:

Group 1	Group 2
1CS020A	2CS020A
1CS020B	2CS020B

The A and B train valves are of the same design (manufacturer, size, model number, and materials of construction) and have the same service conditions, including orientation. This forms an acceptable sample disassembly group per Generic Letter 89-04, Position 2c.

Each group will be disassembled and visually inspected at the same frequency as the Technical Specification eductor flow test, conducted at least once every five years. The visual inspection of internals will precede the eductor flow test. If the disassembled valve is not capable of being manually full-stroked exercised or there is binding or failure of internals, the remaining valve on the affected unit will be evaluated for further action as well.

RELIEF REQUEST VR-2

7. Justification:

Full flow testing of these valves cannot be accomplished without increasing the risk to the safety of equipment and personnel. It is impractical to either full or partial stroke exercise these valves since flow through them requires draining and flushing the piping to prevent the introduction of caustic effluent into the CS system. The problem of mixed waste disposal or recycling created by system draining of approximately two 55 gallon drums is considered an undue hardship if the Code requirements are imposed.

The alternate test frequency which is identical to the frequency of the Technical Specification eductor flow test of at least once every five years, is justifiable in that maintenance history and previous inspections of these valves at both Byron and Braidwood stations have shown no evidence of degradation or physical impairments (i.e. corrosion, chemical buildup, wear). This is to be expected since these valves are never challenged during normal operation.

Industry experience, as documented in NPRDS, show no history of problems with these valves. A company wide check valve evaluation addressing the "EPRI Application Guidelines for Check Valves in Nuclear Power Plants" revealed that the location, orientation and application of these valves are not conducive to the type of wear or degradation correlated with SOER 86-03 type failures.

The alternate test method, visual inspection of internals followed by the Technical Specification eductor flow test, at least once every five years, is sufficient to ensure operability of these valves and is consistent with Generic Letter 89-04 guidelines. The hardship involved with the hazardous mixed waste disposal and handling caustic material with regards to personnel safety does not provide a compensated increase in safety of the CS system equipment.

8. Applicable Time Period:

This relief is requested for the first inspection interval.

9. Approval Status:

- a. Relief granted per Generic Letter 89-04, Rev. 4/4a.
- b. This relief request is being resubmitted based on further experience gained during inservice testing and inspections, Rev. 5.
- c. Resubmitted for mixed waste considerations, Rev. 5 Supplement.