Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

February 6, 1992

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

Attn: Document Control Desk

Subject: Byron Station Units 1 and 2
Braidwood Station Units 1 and 2
Supplement to the application for Amendment to
Facility Operating Licensing NPF-37, NPF-66
NPF-72 and NPF-77
Appendix A, Technical Specifications
TAC # M71200, M71201, M71202, M71203
NRC Docket Nos. 50-454, 50-455, 50-456 and 50-457

Reference:
(a) November 6, 1987 S.C. Hunsader letter to T.E. Murley

(b) February 8, 1991 A.R. Checca letter to T.E. Murley

(c) January 13, 1992 T.W. Simpkin letter to T.E. Murley

. Murley:

In reference (a) Pursuant to 10 CFR 50.90, Commonwealth Edison proposes to ppendix A Technical Specifications, of Facility Operating License NPF-37, NPF-66, and NPF-77. The proposed amendment requests changes to Technical Specification 3.3-6 and 4.3-3, to allow the control room ventilation (VC) system to remain in ion, providing there are two (2) radiation monitors operable on the ventilation train that is ng. Braidwood Unit 2 has been licensed since the time the request was made; ore, these changes apply to Braidwood Station Unit 2, Facility Operating License NPF-77, as well.

Reference (b) updated the request with additional supporting information. Reference (c) documented minor revisions to the change request based on phone conversations with the NRC reviewer. The changes entail clarifications in Attachment A and C to reflect the acceptability of having two radiation monitors in a single train inoperable. The bases have been reviewed, and no changes are required. The Technical Specification has been changed (Attachment B) to incorporate a reporting requirement and to delete cycle specific relief that is no longer applicable.

The purpose of this letter is to amend Reference (c) due to the revision of page 3/4 3-42 subsequent to the original submittal. The amended page will delete a cycle-specific relief which is no longer required. Attachment C is also being revised to include wording which was inadvertently deleted.

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The proposed changes have been reviewed and approved by both on-site and off-site review in accordance with Commonwealth Edison procedures. Commonwealth Edison has reviewed this proposed amendment in accordance with 10 CFR 50.92(c) and has determined that no significant hazards consideration exists. This evaluation is documented in Attachment C. The original Environmental Assessment of Reference (b) remains valid for this supplement.

Commonwealth Edison is notifying the State of Illinois of our application for this amendment by transmitting a copy of this letter and its attachments to the designated State Official.

To the best of my knowledge and belief the statements contained herein are true and correct. In some respects, these statements are not based on my personal knowledge but upon information received from other Commonwealth Edison and contractor employees. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

Please direct any questions you may have concerning this matter to this office.

Very truly yours,

Terrence W. Simpkin

T.W. Simpkin
Nuclear Licensing Administrator

Attachments (A): Revised page
(B): Evaluation of Significant Hazards Consideration

cc: W. Kropp-Resident Inspector, Byron
S. Dupont-Resident Inspector, Braidwood
A. Hsia-Project Manager (Byron), NRR
R. Pulsifer-Project Manager (Braidwood), NRR
B. Clayton-Branch Chief, Region III
Office of Nuclear Facility Safety-IDNS

State of Ill., County of Cook
Subscribed and sworn to before me this 6th
day of February 19 92 by T.W. Simpkin
Notary Public

" OFFICIAL SEAL "
SANDRA C. LARA
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 6/25/94

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ATTACHMENT A

TECHNICAL SPECIFICATION CHANGE REQUEST

PROPOSED CHANGES

The following is a brief description of the changes proposed to the Byron and Braidwood, Units 1 and 2, Technical Specifications.

Table 3.3-6 and 4.3-3, pages 3/4 3-40 and 4-42 respectively, are being revised to designate the radiation monitors assigned to each train of control room ventilation (VC).

Action statement 27, on page 3/4 3-41, is being revised to allow the option of operating a fully functional train of VC when one (1) or more radiation monitors in the opposite VC train are inoperable. With one (1) or more monitors inoperable in each train, the current requirement to place the system in its ESF configuration will be retained.

Additionally, page 3/4 3-41 for Byron and pages 3/4-3-39 and 3/4 3-41 for Braidwood are being revised to delete cycle-specific reliefs which are no longer applicable.

DESCRIPTION OF CURRENT REQUIREMENT

The VC system consists of two independent trains, each possessing 100% of the required airflow and filter capacity to ensure that the area remains habitable under postulated accident conditions. Each train of VC is equipped with a physically diverse outside air intake and a turbine building intake. Each redundant train is located in a separate room. The outside air intake is the normal source of makeup air.

Each outside air intake is equipped with two radiation monitors. These monitors provide an interlock function which, upon receipt of a high radiation signal on either monitor or an operate failure signal on both monitors, will automatically align the makeup air filter unit, various dampers and the recirculation charcoal adsorber to the emergency mode. The system also automatically realigns to the emergency mode on a safety injection (SI) signal.

The Technical Specification currently requires that all four radiation monitors, two in each outside air intake, be operable. In the event that a monitor becomes inoperable, whichever train of VC is in operation is required to be aligned to the emergency configuration.

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BASES FOR THE CURRENT REQUIREMENT

The current Technical Specification provides assurance that the control room operators can remain inside all spaces served by the VC system for Units 1 and 2 during all normal station conditions in compliance with Criterion 19 of 10 CFR 50, Appendix A. The control room is a common facility which serves both Units 1 and 2. Only one VC train is normally in operation with a full capacity redundant train in standby. Two radiation monitors are provided in each VC train air intake to detect high radiation. The VC air intakes are at opposite ends of the auxiliary building. The physical location of the intake provides the option drawing makeup air for the control room from the less contaminated intake during and after a LOCA. It is possible one of the makeup air intakes may not have any contaminants while the other may have contaminants. The current specification requires a level of redundancy which ensures that the realignment of the system will be accomplished regardless of any single failure.

The accident of interest, as described in the UFSAR 6.4.4.1, page 6.4-11, is the large break LOCA, and it is assumed to be bounding. The radiation monitors associated with the outside air intakes function to align the makeup filter unit and the recirculation charcoal adsorber in order to reduce the radiation levels in the control room to an acceptable level during accident conditions.

DESCRIPTION OF THE NEED FOR AMENDING THE REQUIREMENT

The current requirement is overly restrictive in that it requires a VC train to be placed in its emergency configuration upon the failure of a single radiation monitor. With one or more inoperable radiation monitors in a single VC train, a redundant full capacity VC train with a full complement of radiation monitors is still available. Sufficient redundancy is available such that a single failure of an additional radiation monitor can still be accommodated.

The current requirement results in charcoal filters being placed on line for the duration of the monitor inoperability. This results in needless depletion of the charcoal capability and subsequent expenditures with no resulting safety benefit.

BASES FOR THE AMENDED REQUIREMENT

The amended requirement will allow for the operation of a VC train having its full complement of radiation monitors. The operating train of VC will be capable of realigning to the emergency mode on an SI signal, high radiation signal from either of its two (2) operable monitors or an operate failure signal from both of its operable monitors. When any of these initiation signals exists the operating train of VC aligns to the emergency mode and the makeup fan starts. The standby train of VC aligns to the emergency mode on an SI signal or from inputs from its respective radiation monitors, however, the fans in the standby train do not automatically start. These functions are not being changed; therefore, if the operating train should fail, manual intervention would be required to start the fans in the idle VC train.

The VC system realigns to the emergency mode on an SI signal without the benefit of any input from the radiation monitors. This reduces the accidents of interest to those that have the potential for a release of radioactivity without causing an SI signal. However, the proposed change only permits operation of a VC train in the normal mode if both its intake radiation monitors are operable; therefore, those accidents which result in a release of radioactivity but do not cause an SI signal are captured by the original assumptions in the accident analysis. The proposed change does not render the system vulnerable to any single failure which would preclude the accomplishment of the system's design safety function.

There is significant economic benefit to be gained with the proposed change. Each filter has a limited life. Frequent operation of the charcoal filter banks during normal operations degrades the charcoal with no added safety benefit. Depletion of the charcoal would require shutdown of both units if it could not be replaced and tested within seven (7) days. The cost of replacing the charcoal in one VC train is conservatively estimated to be $40,000.

Although no direct safety benefit can be achieved, there is no reduction in the level of protection afforded the control room inhabitants.

SCHEDULE REQUIREMENTS

No specific schedular restraints have been identified.