Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

December 17, 1992

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

Attention: Document Control Desk

Subject: Braidwood Station, Units 1 & 2
10 CFR 50.59 Annual Report
NRC Docket Nos. 50-456 and 50-457

Dear Dr. Murley:

Pursuant to 10 CFR 50.59(b)(2), Commonwealth Edison is providing the required annual report for Braidwood Station (Facility Operating License Nos. NPF-72 and NPF-77). The annual requirement is based on the Unit 1 fuel load license (NPF-59) issuance date of October 17, 1986.

This report covers the period from 12/19/91 to 6/18/92 and consists of the descriptions and the safety evaluation summaries for changes to the facility described in the Safety Analysis Report. Included also as part of this report are changes made to features of the Fire Protection Program not previously approved by the Commission. No tests or experiments governed by 10CFR50.59 (a)(1)(iii) were performed.

Currently, the UFSAR and Fire Protection Report revisions are submitted by December 18 of each year. This date is based on the anniversary of the Braidwood Unit 2 Operating License. These reports cover the period from June 19 of the previous year to June 18 of the year the reports are due. In order to better coordinate the generation of the above reports and the 50.59 annual report, Commonwealth Edison has shifted the reporting date for annual 50.59 reports to match the UFSAR and Fire Protection Report Revisions. To accomplish this, an interim report covering the period of 6/19/91 to 12/18/91 was submitted on June 17, 1992. Subsequent 50.59 reports shall be submitted annually on the same schedule as the UFSAR and Fire Protection Report revisions.

Please direct any questions regarding this matter to this office.

Respectfully,

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

cc: R. Elliott-Braidwood Project Manager, NRR
B. Clayton-Chief, Branch Chief RIII
S.G. DuPont-Braidwood Senior Resident Inspector

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Braidwood Nuclear Power Station

10 CFR 50.59 Annual Report

1992

NRC Docket Nos. 50-456 AND 50-457

License Nos. NPF-72 AND NPF-77

I. FACILITY CHANGES

A. MINOR PLANT CHANGES

1. P20-2-90-006
2. P20-2-90-036

B. MODIFICATIONS

1. M20-1-88-065 and
   M20-2-88-068
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C. SETPOINT/SCALING CHANGES

1. SSCR 87-042

II. PROCEDURE CHANGES

A. PROCEDURAL UFSAR CHANGES

1. UFSAR DRP 3-031
2. UFSAR DRP 4-005

B. STATION ONSITE REVIEWS

1. OSR 92-003

C. STATION PROCEDURE REVISIONS

1. BwRP 1240-9, Revision 3

III. TESTS/EXPERIMENTS

None

MINOR PLANT CHANGE

P20-2-90-006

DESCRIPTION:

This minor plant change replaces the seal injection filter inlet and outlet valves. The existing valves are two inch diameter Kerotest valves. The new valves are two inch diameter KSB bellows sealed valves. The existing valves are prone to through leakage and stem leakage.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because the new valves will be more reliable than the existing valves.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because the new valves serve identical functions to the existing valves. No new accidents or malfunctions are created by their installation.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the new valves will serve all the same functions as the existing valves. A modification test will confirm that the valves have satisfactory hydraulic characteristics to maintain the Technical Specification safety margins.

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MINOR PLANT CHANGE

P20-2-90-036

DESCRIPTION:

This minor plant change reduces the lift setpoint of 2CV8119, Downstream Letdown Pressure Control Relief Valve, from 300 psig to 230 psig by installing a new spring and washer assembly. This change will provide added protection from overpressurization to lower elevation components in the Chemical and Volume Control System and related systems.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because the valve body is unchanged and only the spring/washer assembly will be changed. The new setpoint will result in lower maximum pressure in the CVCS system and related systems which will decrease the probability of a malfunction of valves or other components important to safety.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because only the internal spring/washer assembly is being changed with all of the other characteristics remaining the same. The inadvertent lifting of the relief valve is analyzed for in the UFSAR as well as the failure of the relief valve body.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the lowering of the lift setpoint will prevent overpressurization due to elevation differences in the CVCS system and related systems. This increases the margin of safety for the CVCS system and related systems.

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MODIFICATIONS

M20-1-88-065 and M20-2-88-068

DESCRIPTION:

These modifications reconnect fire protection deluge valve alarm horns for the system auxiliary, unit auxiliary, and main power transformers.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because the function and operation of the affected fire protection systems, as described in the Fire Protection Report, is not affected by these modifications which only reconnect existing alarm horns. The design of these modifications is consistent with NFPA Code requirements regarding alarm provisions for fire protection sprinkler systems.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because the installation of these modifications introduces no new failure modes to impact the ability of the affected fire protection systems to perform their intended functions. This design change utilizes existing spare pressure switch contacts and associated wiring to reconnect existing water flow alarm horns.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the plant fire protection system is not specifically addressed by the Technical Specifications. These modifications only reconnect existing fire alarm horns. Accordingly, the margin of safety is unaffected.

MODIFICATION

M20-1-90-014

DESCRIPTION:

This modification replaces the existing opposite division power D.C. operated "fail as left" solenoid operated valve in each train of the hydrogen monitoring system with a D.C. operated "fail open" solenoid operated valve. With this new configuration in place a loss of power in one ESF division will not leave a failed close valve in the opposite division.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because this equipment has no function in an accident other than containment isolation. This function has not changed. The containment isolation function will still occur in the event of a safety injection actuation. The consequences of the accident will not be increased because containment integrity is maintained by the other isolation valves in series. This equipment performs a containment isolation function and does not affect other plant systems. The probability of a malfunction of equipment important to safety is not increased because all other equipment is unchanged and the valve still performs its original isolation function. The consequences of a malfunction of equipment important to safety does not increase because the equipment functions and systems remain the same. The valves being modified which still perform the containment isolation function.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because the UFSAR assumptions for accident assumes that all containment isolation valves close and remain closed throughout and after the accident valves manually reopened. The modified valves will "fail open" upon a loss of a D.C. ESF bus which is different than previously assumed. The containment isolation will still be maintained through the other valves in series. This configuration has been submitted to the NRC, evaluated by NRC and found acceptable. On April 19, 1991 the NRC issued the supplemental Safety Evaluation which accepts this modification.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because valves still provide containment isolation function. In the event of a loss of one division of DC ESF power containment isolation is maintained and hydrogen monitoring is still achievable.

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SETPOINT/SCALING CHANGE

SSCR 87-042

DESCRIPTION:

This setpoint/scaling change involves increasing the alarm setpoint for the Hydrogen System Supply Manifold Pressure instrument OPS-1065A/B from 110 psig to 130 psig to eliminate nuisance alarms.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because the operating pressure remains the same. The setpoint/scaling change is only to clear nuisance alarms. Therefore, the probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in FSAR Section 11.3 is not increased.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because there is no change in the design of the system, so the possibility of an accident of a different type has not been created as per FSAR Section 11.3.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the setpoint change does not affect the requirements or the bases for the Technical Specifications, particularly 3/4.11.2.4 and 3/4.11.5. (It is to be noted that Specification 3/4.11.2.4 has subsequently been deleted, and the requirements relocated to the ODCM per NRC Generic Letter 89-01.)

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UFSAR PROCEDURAL CHANGE

UFSAR DRP 3-031

DESCRIPTION:

This UFSAR change involves making the spent fuel pool boron concentration limit of 2000 ppm a recommended value and setting 1500 ppm as the new minimum value. This is for consistency with an engineering evaluation for the high density spent fuel racks. This study showed that 300 ppm is the minimum value required. Setting 1500 ppm as the limit provides additional margin.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because the limit of 1500 ppm exceeds the analyzed limit of 300 ppm.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because the limit of 1500 ppm exceeds the analyzed limit of 300 ppm.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the change has no impact to the requirements or bases of the Technical Specifications.

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UFSAR PROCEDURAL CHANGE

UFSAR DRP 4-005

DESCRIPTION:

This UFSAR change involves eliminating the out-of-service requirement which removes power from valve VQ003. This is for consistency with NUREG-0737 and NUREG-0800 and with similar valves VQ004A/B and VQ005A/B/C. The VQ003 valve is a containment isolation valve which isolates the flowpath to the containment Post-LOCA Purge Unit.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence of the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because the change does not affect the safety features of the valve, and the valve will continue to close on a containment isolation signal, and fail closed on a loss of air/power.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because the valve will continue to operate as designed.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the change has no impact to the requirements or bases of the Technical Specifications

STATION ONSITE REVIEW

OSR 92-003

DESCRIPTION:

This onsite review involves changing the lineup of the nitrogen cylinders to normally isolated rather than normally open. This is to provide a backup supply for the low pressure portion of the nitrogen system.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because the nitrogen system is not used to mitigate the consequences of any accident.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because the change will enhance (increase) the amount of nitrogen available if the low pressure supply were to run low. The nitrogen system does not affect the initial (assumed) conditions for any analyzed accident, nor could the change result in a malfunction of systems or components served by nitrogen so as to create another accident.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the change has no impact on the requirements or bases of the Technical Specifications.

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STATION PROCEDURE REVISION

BwRP 1240-9, Revision 3

DESCRIPTION:

This station procedure revision involves changing the calibration frequency of certain health physics instrumentation from quarterly to semiannually. This is for consistency with ANSI N323-1978.

SAFETY EVALUATION SUMMARY:

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because the change has no impact to the accidents discussed in the FSAR.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because the health physics equipment, should they fail or malfunction, would not affect plant operations.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the change has no impact on the requirements or bases of the Technical Specifications.

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