

RS-01-075

September 21, 2001

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Braidwood Station, Units 1 and 2
Facility Operating License Nos. NPF-72 and NPF-77
NRC Docket Nos. STN 50-456 and STN 50-457

Byron Station, Units 1 and 2
Facility Operating License Nos. NPF-37 and NPF-66
NRC Docket Nos. STN 50-454 and STN 50-455

Subject: Request for Technical Specifications Change to Eliminate Requirements for Post Accident Sampling System Using the Consolidated Line Item Improvement Process Amendment

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," we are proposing a change to the Technical Specifications (TS) of Facility Operating License Nos. NPF-72, NPF-77, NPF-37 and NPF-66, for the Braidwood Station, Units 1 and 2, and the Byron Station, Units 1 and 2, respectively. The proposed change deletes TS 5.5.3, "Post Accident Sampling," and thereby eliminates the requirement to have and maintain the Post Accident Sampling System (PASS) at the Braidwood Station and the Byron Station. The change is consistent with NRC approved Industry/TS Task Force (TSTF) Standard TS Change Traveler, TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of this TS improvement was announced in the Federal Register, Volume 65, Number 211, "Notice of Availability for Referencing in License Amendment Applications - Model Safety Evaluation on Technical Specification Improvement To Eliminate Requirements on Post Accident Sampling Systems," Pages 65018-65024, on October 31, 2000, as part of the Consolidated Line Item Improvement Process (CLIIP).

This proposed change has been reviewed and approved by the Braidwood Station and the Byron Station Plant Operations Review Committees and the Nuclear Safety Review Board in accordance with the requirements of the Quality Assurance Program.

Exelon Generation Company, LLC is notifying the State of Illinois of this application for a change to the TS by transmitting a copy of this letter and its attachments to the designated State Official.

Pool

This proposed amendment request is subdivided as follows.

1. Attachment A provides a description of the proposed change, the requested confirmation of applicability of the model safety evaluation (SE) and no significant hazards consideration (NSHC) determination, and plant-specific verifications.
2. Attachments B-1 and B-2 include the marked-up TS page with the requested change indicated for Braidwood Station and Byron Station, respectively. Attachments B-3 and B-4 include the associated typed page with the proposed change incorporated for Braidwood Station and Byron Station, respectively. Attachments B-5 and B-6 include the associated TS Bases page for information only with the proposed change incorporated for the Braidwood Station and the Byron Station, respectively.
3. Attachment C provides a summary of the licensing commitments made in this submittal.

We request approval of the proposed change by March 31, 2002, with the amendment being implemented November 15, 2002. The approval date was administratively selected to allow for NRC review but the plant does not require this amendment to allow continued safe full power operation.

Should you have any questions concerning this letter, please contact Ms. Kelly M. Root at (630) 657-2820.

Respectfully,


T. W. Simpkin
Manager, Licensing
Midwest Regional Operating Group

Affidavit

August 31, 2001
U. S. Nuclear Regulatory Commission
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Attachments:

Attachment A: Description and Assessment
Attachment B-1: Marked-Up TS Page for Proposed Change for Braidwood Station
Attachment B-2: Marked-Up TS Page for Proposed Change for Byron Station
Attachment B-3: Incorporated TS Page for Proposed Change for Braidwood Station
Attachment B-4: Incorporated TS Page for Proposed Change for Byron Station
Attachment B-5: Incorporated TS Bases Page for the Braidwood Station - Information Only
Attachment B-6: Incorporated TS Bases Page for the Byron Station - Information Only
Attachment C: List of Commitments

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - Braidwood Station
NRC Senior Resident Inspector - Byron Station
Office of Nuclear Facility Safety - Illinois Department of Nuclear Safety

STATE OF ILLINOIS)
COUNTY OF DUPAGE)
IN THE MATTER OF)
EXELON GENERATION CO., LLC) Docket Numbers
BRAIDWOOD STATION UNITS 1 AND 2) STN 50-456 AND STN 50-457
BYRON STATION UNITS 1 AND 2) STN 50-454 AND STN 50-455

SUBJECT: Request for Technical Specifications Change to Eliminate Requirements for Post Accident Sampling System Using the Consolidated Line Item Improvement Process Amendment

AFFIDAVIT

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information and belief.

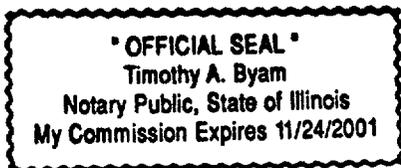
Terrence W. Simpkin
T. W. Simpkin
Manager, Licensing
Midwest Regional Operating Group

Subscribed and sworn to before me, a Notary Public in and

for the State above named, this 21st day of

September, 2001.

Timothy A. Byam
Notary Public



ATTACHMENT A
DESCRIPTION AND ASSESSMENT

1.0 INTRODUCTION

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," we are proposing a change to the Technical Specifications (TS) of Facility Operating License Nos. NPF-72, NPF-77, NPF-37 and NPF-66, for the Braidwood Station, Units 1 and 2, and the Byron Station, Units 1 and 2, respectively. The proposed change deletes TS 5.5.3, "Post Accident Sampling," and thereby eliminates the requirement to have and maintain the Post Accident Sampling System (PASS) at the Braidwood Station and the Byron Station.

2.0 DESCRIPTION

The proposed change deletes TS 5.5.3. The change is consistent with NRC approved Industry/TS Task Force (TSTF) Standard TS Change Traveler, TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)" (Reference 1). The availability of this TS improvement was announced in the Federal Register, Volume 65, Number 211, "Notice of Availability for Referencing in License Amendment Applications - Model Safety Evaluation on Technical Specification Improvement To Eliminate Requirements on Post Accident Sampling Systems Using the Consolidated Line Item Improvement Process," Pages 65018-65024, on October 31, 2000, as part of the Consolidated Line Item Improvement Process (CLIIP) (Reference 2).

3.0 BACKGROUND

Westinghouse Owners Group (WOG) topical report WCAP-14986-A, Revision 2, "Post Accident Sampling System Requirements: A Technical Basis," dated July 2000 (Reference 3), evaluated the PASS requirements to determine their contribution to plant safety and accident recovery. The topical report considered the progression and consequences of core damage accidents and assessed the accident progression with respect to plant abnormal and emergency operating procedures, severe accident management guidance, and emergency plans. WCAP-14986-A, Revision 2, concluded that the current PASS samples specified in NUREG-0737, "Clarification of TMI Action Plan Requirements," dated November 1980, may be eliminated.

4.0 TECHNICAL ANALYSIS

4.1 Applicability of Published Safety Evaluation

Exelon Generation Company, LLC (Exelon) has reviewed the model safety evaluation (SE) published as part of the CLIIP on October 31, 2000. This verification included a review of the NRC's evaluation as well as the supporting information provided to support TSTF-366 (i.e., WCAP-14986-A, Revision 2, "Post Accident Sampling System Requirements: A Technical Basis," submitted October 26, 1998, as supplemented by letters dated April 28, 1999, April 10, 2000, and May 22, 2000). We have concluded that the justifications presented in the TSTF proposal and the SE prepared by the NRC are applicable to the Braidwood Station and the Byron Station and justify this amendment for the incorporation of the changes to the Braidwood Station and the Byron Station TS.

4.2 Optional Changes and Variations

Exelon is not proposing any variations or deviations from the technical specification changes described in TSTF-366 or the NRC's model SE published on October 31, 2000.

The elimination of PASS results in a change to the discussion in the TS Bases B3.3.3, "Post Accident Monitoring Instrumentation." The current Bases mention the capabilities of PASS as part of the justification for allowing both hydrogen monitor channels to be out of service for a period of up to 72 hours. A proposed change to the TS Bases B3.3.3 is provided in Attachments B-5 and B-6 for the Braidwood Station and the Byron Station, respectively. Attachments B-5 and B-6 are provided for information only and the associated TS Bases change will be made in accordance with TS 5.5.14, "Technical Specifications (TS) Bases Control Program."

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Determination

Exelon has reviewed the proposed no significant hazards consideration (NSHC) determination published as part of the CLIIP on October 31, 2000. We have concluded that the proposed determination presented in the notice is applicable to the Braidwood Station and the Byron Station and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a), "Notice for public comment."

5.2 Verification and Commitments

As discussed in the notice of availability published in the Federal Register (Reference 2) for this TS improvement, plant-specific verifications were performed as follows.

1. Exelon has developed contingency plans for obtaining and analyzing highly radioactive samples of the reactor coolant, containment sump, and containment atmosphere. The contingency plans will be contained in the Braidwood Station and the Byron Station Chemistry procedures and implemented with the implementation of the License amendment. Establishment of contingency plans is considered a regulatory commitment.
2. The capability for classifying fuel damage events at the Alert level threshold will be established at a level of core damage associated with radioactivity levels of 300 $\mu\text{Ci/gm}$ dose equivalent iodine. This capability will be described in our emergency plan and emergency plan implementing procedures and implemented with the implementation of the License amendment. The capability for classifying fuel damage events is considered a regulatory commitment.
3. Exelon has established the capability to monitor radioactive iodines that have been released offsite to the environs. This capability is described in our emergency plan and emergency plan implementing procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.

6.0 ENVIRONMENTAL EVALUATION

Exelon has reviewed the environmental evaluation included in the model SE published as part of the CLIP on October 31, 2000. Exelon has determined that the NRC's findings presented in that evaluation are applicable to the Braidwood Station and the Byron Station and the evaluation is hereby incorporated by reference for this application.

7.0 REFERENCES

1. Industry/Technical Specifications Task Force Standard Technical Specification Change Traveler TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)."
2. Federal Register, Volume 65, Number 211, Pages 65018-65024, "Notice of Availability for Referencing in License Amendment Applications Model Safety Evaluation on Technical Specification Improvement To Eliminate Requirements on Post Accident Sampling Systems Using the Consolidated Line Item Improvement Process," dated October 31, 2000.
3. Westinghouse Owners Group (WOG) topical report WCAP-14986-A, Revision 2, "Post Accident Sampling System Requirements: A Technical Basis," dated July 2000.

ATTACHMENT B-1

**MARKED-UP TS PAGE FOR PROPOSED CHANGE
BRAIDWOOD STATION, UNITS 1 AND 2**

MARKED-UP TS PAGE

5.5-2

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

3. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.
-

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the recirculation portions of the Containment Spray, Safety Injection, Chemical and Volume Control, and Residual Heat Removal. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
 - b. Integrated leak test requirements for each system at refueling cycle intervals or less.
-

~~Deleted.~~

5.5.3 ~~Post Accident Sampling~~

~~This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:~~

- ~~a. Training of personnel;~~
 - ~~b. Procedures for sampling and analysis; and~~
 - ~~c. Provisions for maintenance of sampling and analysis equipment.~~
-

ATTACHMENT B-2
MARKED-UP TS PAGE FOR PROPOSED CHANGE
BYRON STATION, UNITS 1 AND 2

MARKED-UP TS PAGE

5.5-2

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

3. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.
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This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the recirculation portions of the Containment Spray, Safety Injection, Chemical and Volume Control, and Residual Heat Removal. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
 - b. Integrated leak test requirements for each system at refueling cycle intervals or less.
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- ~~a. Training of personnel;~~
 - ~~b. Procedures for sampling and analysis; and~~
 - ~~c. Provisions for maintenance of sampling and analysis equipment.~~
-

ATTACHMENT B-3

**INCORPORATED TS PAGE FOR PROPOSED CHANGE
BRAIDWOOD STATION, UNITS 1 AND 2**

TS PAGE

5.5-2

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

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- a. Preventive maintenance and periodic visual inspection requirements; and
 - b. Integrated leak test requirements for each system at refueling cycle intervals or less.
-

| 5.5.3 Deleted.

ATTACHMENT B-4
INCORPORATED TS PAGE FOR PROPOSED CHANGE
BYRON STATION, UNITS 1 AND 2

TS PAGE

5.5-2

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

3. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.
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- a. Preventive maintenance and periodic visual inspection requirements; and
 - b. Integrated leak test requirements for each system at refueling cycle intervals or less.
-

| 5.5.3 Deleted.

ATTACHMENT B-5

**INCORPORATED TS BASES PAGE FOR PROPOSED CHANGE
BRAIDWOOD STATION, UNITS 1 AND 2
(FOR INFORMATION ONLY)**

TS BASES PAGES

B 3.3.3-14

BASES

ACTIONS (continued)

F.1

Condition F applies when two hydrogen monitor channels are inoperable. Required Action F.1 requires restoring one hydrogen monitor channel to OPERABLE status within 72 hours. The 72 hour Completion Time is reasonable based on other core damage assessment capabilities available to monitor the hydrogen concentration for evaluation of core damage and to provide information for operator decisions. Also, it is unlikely that a LOCA (which would cause core damage) would occur during this time.

G.1 and G.2

If the Required Action and associated Completion Time of Condition D, E, or F is not met, the unit must be brought to a MODE where the requirements of this LCO do not apply. To achieve this status, the unit must be brought to at least MODE 3 within 6 hours and MODE 4 within 12 hours. Condition G is also modified by a Note that excludes Functions 11, 12, and 14. Required Action G.2 is modified by a Note that excludes Function 15 since the hydrogen monitors are only applicable in MODES 1 and 2.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging plant systems.

ATTACHMENT B-6

**INCORPORATED TS BASES PAGE FOR PROPOSED CHANGE
BYRON STATION, UNITS 1 AND 2
(FOR INFORMATION ONLY)**

TS BASES PAGES

B 3.3.3-14

BASES

ACTIONS (continued)

F.1

Condition F applies when two hydrogen monitor channels are inoperable. Required Action F.1 requires restoring one hydrogen monitor channel to OPERABLE status within 72 hours. The 72 hour Completion Time is reasonable based on other core damage assessment capabilities available to monitor the hydrogen concentration for evaluation of core damage and to provide information for operator decisions. Also, it is unlikely that a LOCA (which would cause core damage) would occur during this time.

G.1 and G.2

If the Required Action and associated Completion Time of Condition D, E, or F is not met, the unit must be brought to a MODE where the requirements of this LCO do not apply. To achieve this status, the unit must be brought to at least MODE 3 within 6 hours and MODE 4 within 12 hours. Condition G is also modified by a Note that excludes Functions 11, 12, and 14. Required Action G.2 is modified by a Note that excludes Function 15 since the hydrogen monitors are only applicable in MODES 1 and 2.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging plant systems.

ATTACHMENT C

LIST OF COMMITMENTS

The following table identifies those actions committed to by Exelon Generation Company, LLC (Exelon) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments.

COMMITMENT	Due Date/Event
Exelon has developed contingency plans for obtaining and analyzing highly radioactive samples of the reactor coolant, containment sump, and containment atmosphere. The contingency plans will be contained in the Braidwood Station and the Byron Station Chemistry procedures and implemented with the implementation of the License amendment. Establishment of contingency plans is considered a regulatory commitment.	Implemented with the implementation of the License amendment
The capability for classifying fuel damage events at the Alert level threshold will be established at a level of core damage associated with radioactivity levels of 300 μ Ci/gm dose equivalent iodine. This capability will be described in our emergency plan and emergency plan implementing procedures and implemented with the implementation of the License amendment. The capability for classifying fuel damage events is considered a regulatory commitment.	Implemented with the implementation of the License amendment
Exelon has established the capability to monitor radioactive iodines that have been released offsite to the environs. This capability is described in our emergency plan and emergency plan implementing procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.	Complete, capability currently exists