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10 CFR 50.90

RS-08-037

March 18, 2008

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

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

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

Subject: Application for License Amendment to Revise the Numbering of Two Engineered Safety Feature Actuation System Instrumentation Surveillance Requirements

References:

1. Letter from D. M. Benyak (Exelon Generation Company, LLC) to U. S. NRC, "Application for License Amendment: Implementation of WCAP-14333 and WCAP-15376, Reactor Trip System Instrumentation and Engineered Safety Feature Actuation System Instrumentation Test Times, Completion Times and Surveillance Test Intervals," dated January 8, 2007

2. Letter from M. M. Thorpe-Kavanaugh (U. S. NRC) to C. G. Pardee (Exelon Generation Company, LLC), "Byron Station, Unit Nos. 1 and 2, and Braidwood Station, Units 1 and 2 - Issuance of Amendments RE: Technical Specification Request to Extend Reactor Trip System and Engineered Safety Features Actuation System Completion Times, Bypass Test Times, and Surveillance Test Intervals (TAC Nos. MD4009, MD4010, MD4011, and MD4012)" dated January 29, 2008

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (EGC) requests an amendment to Appendix A, Technical Specifications (TS) of Facility Operating License Nos. NPF-72, NPF-77, NPF-37, and NPF-66 for Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2, respectively.

The proposed amendment revises the TS Surveillance Requirement (SR) numbering for two Engineered Safety Feature Actuation System (ESFAS) instrumentation SRs that were previously revised in Reference 2. This earlier revision of the numbering scheme introduced inconsistencies within TS 3.3.2. In addition, the proposed amendment requests an extension of the NRC-specified 120-day period for the implementation of the changes to SRs 3.3.2.6 and 3.3.2.7 that were previously approved in the original Reference 2 license amendment.

These proposed changes are purely administrative in that they correct a previously introduced SR numbering inconsistency, and revise a previously approved implementation period to be consistent with the requested approval date for these proposed changes. The proposed SR numbering reestablishes consistency of the two ESFAS instrumentation SRs with the existing SR table for the ESFAS instrumentation. In addition, the proposed revision establishes consistency with the ESFAS instrumentation SR numbering in NUREG-1431, "Standard Technical Specifications Westinghouse Plants."

This request is subdivided as follows:

- Attachment 1 provides an evaluation of the proposed changes.
- Attachments 2A and 2B contain the marked-up TS pages with the proposed changes indicated for Braidwood Station and Byron Station, respectively.

The proposed changes have been reviewed by the Plant Operations Review Committees at each of the stations and approved by the respective Nuclear Safety Review Boards in accordance with the requirements of the EGC Quality Assurance Program.

EGC requests approval of the proposed amendments by March 19, 2009 with an implementation period of 30 days following approval.

In accordance with 10 CFR 50.91(b), EGC is notifying the State of Illinois of this application for changes to the TS by transmitting a copy of this letter and its attachments to the designated State Official.

There are no regulatory commitments in this license amendment request. If you have any questions, please contact Mr. John L. Schrage at (630) 657-2821.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 18th day of March 2008.

Respectfully,

Jeffrey L. Hansen
Manager - Licensing

Attachments:

| | |
|---|---|
| Attachment 1 | Evaluation of Proposed Changes |
| Attachment 2A | Braidwood Station Marked-Up Technical Specification Page |
| Attachment 2B | Byron Station Marked-Up Technical Specification Page |

cc: Regional Administrator - Region III, NRC
NRC Senior Resident Inspector - Braidwood Station
NRC Senior Resident Inspector - Byron Station

**ATTACHMENT 1**
Evaluation of Proposed Changes

1.0 DESCRIPTION

2.0 BACKGROUND

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**ATTACHMENT 1**
Evaluation of Proposed Changes

## 1.0 DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (EGC) hereby requests an amendment to Appendix A, Technical Specifications (TS) of Facility Operating License Nos. NPF-72, NPF-77, NPF-37, and NPF-66 for Braidwood Station, Units 1 and 2, and Byron Station Units 1 and 2, respectively.

The proposed amendment revises the TS Surveillance Requirement (SR) numbering for two Engineered Safety Feature Actuation System (ESFAS) instrumentation SRs that were previously revised in Reference 2. This earlier revision of the numbering scheme introduced inconsistencies within TS 3.3.2. In addition, the proposed amendment requests an extension of the NRC-specified 120-day period for implementation of the changes to SRs 3.3.2.6 and 3.3.2.7 that were previously approved in the original Reference 2 license amendment.

These proposed changes are purely administrative in that they correct a previously introduced SR numbering inconsistency, and revise a previously approved implementation period to be consistent with the requested approval date for these proposed changes. The proposed SR numbering reestablishes consistency of the two ESFAS instrumentation SRs with the existing SR table for the ESFAS instrumentation. In addition, the proposed revision establishes consistency with the ESFAS instrumentation SR numbering in NUREG-1431, "Standard Technical Specifications Westinghouse Plants."

The proposed amendment reverses the numbering of SR 3.3.2.6, "Trip Actuating Device Operational Test (TADOT)" and SR 3.3.2.7, "Channel Operational Test (COT)," such that the COT will become SR 3.3.2.6 and the TADOT will become SR 3.3.2.7. In addition, the proposed amendment requests extension of the NRC-specified 120-day period for implementation of the previously approved changes to SRs 3.3.2.6 and 3.3.2.7 to 30 days following approval of this proposed amendment.

## 2.0 BACKGROUND

In Reference 1, EGC submitted a license amendment request (LAR) to revise the TS requirements for selected Reactor Trip System (RTS) instrumentation, ESFAS instrumentation, and Containment Ventilation Isolation instrumentation to adopt Completion Time, test bypass time, and Surveillance Test Interval (STI) changes.

As part of the Reference 1 LAR, EGC also requested to renumber the ESFAS instrumentation SRs for a COT SR and a TADOT SR. The proposed numbering of these two SRs in the LAR established an STI sequence for the ESFAS SRs that progressed from shortest to longest. However, the references to these two SRs in the accompanying STI table (i.e., Table 3.3.2-1, " Engineered Safety Feature Actuation System Instrumentation") were not revised to reflect the change in SR numbering.

The NRC approved the Reference 1 LAR in Reference 2, including the proposed SR renumbering, with an implementation period of 120 days.

## 3.0 PROPOSED CHANGES

EGC proposes to renumber SRs 3.3.2.6 and 3.3.2.7 that were previously approved in the Reference 2 license amendment (i.e., a TADOT SR and a COT SR, respectively) to the following:

| | | |
|---|---|---|
| SR 3.3.2.6 | Perform COT. | 184 days |
| SR 3.3.2.7 | ----------NOTE----------<br>Verification of relay setpoints not required.<br>----------<br><br>Perform TADOT. | <br><br><br><br>92 days |

EGC proposes to revise the NRC-specified period for implementation of SRs 3.3.2.6 and 3.3.2.7 that were previously approved in the Reference 2 license amendment to 30 days following approval of this proposed license amendment.

## 4.0 TECHNICAL ANALYSIS

The proposed change to renumber two ESFAS instrumentation SRs is administrative in nature. The proposed change does not alter the ESFAS instrumentation design, physical configuration, operation, or testing. The revised SR numbering will correct an administrative error that was inadvertently introduced as part of the Reference 1 LAR submitted by EGC.

By renumbering the SRs, as opposed to revising Table 3.3.2-1, EGC will be able to avoid revision to, and implementation of multiple procedure revisions. This will help minimize potential TS compliance and procedure adherence errors associated with minor numbering changes in procedures. The proposed renumbering progression for ESFAS instrumentation SRs is consistent with the SR numbering progression in NUREG-1431.

The proposed change to extend the period for implementation of the changes to SRs 3.3.2.6 and 3.3.2.7 will ensure correct implementation of these previously approved changes.

## 5.0 REGULATORY ANALYSIS

### 5.1 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (EGC) requests an amendment to Appendix A, Technical Specifications (TS) of Facility Operating License Nos. NPF-72, NPF-77, NPF-37, and NPF-66 for Braidwood Station, Units 1 and 2, and Byron Station Units 1 and 2, respectively.

The proposed amendment revises the TS Surveillance Requirement (SR) numbering for two Engineered Safety Feature Actuation System (ESFAS) instrumentation SRs that were previously revised in Reference 2. This earlier revision of the numbering scheme introduced inconsistencies within TS 3.3.2. In addition, the proposed amendment requests an extension of the NRC-specified 120-day period for implementation of the changes to SRs 3.3.2.6 and 3.3.2.7 that were previously approved in the Reference 2 license amendment to 30 days following approval of this license amendment.

These proposed changes are purely administrative in that they correct a previously introduced SR numbering inconsistency and revise a previously approved implementation period to establish consistency with the requested approval date for these proposed changes. The proposed SR numbering reestablishes consistency of the two ESFAS instrumentation SRs with the existing SR table for the ESFAS instrumentation. In addition, the proposed revision establishes consistency with the ESFAS instrumentation SR numbering in NUREG-1431, "Standard Technical Specifications Westinghouse Plants." The proposed amendment reverses the numbering of SR 3.3.2.6, "Trip Actuating Device Operational Test (TADOT)" and SR 3.3.2.7, "Channel Operational Test (COT)," such that the COT will become SR 3.3.2.6 and the TADOT will become SR 3.3.2.7. The proposed extension for implementation of the changes to SRs 3.3.2.6 and 3.3.2.7 that were previously approved ensures correct implementation of these previously approved changes.

According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or

2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or

3. Involve a significant reduction in a margin of safety.

In support of this determination, an evaluation of each of the three criteria set forth in 10 CFR 50.92 is provided below regarding the proposed license amendment.

1. **The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.**
The proposed revision to the numbering of two ESFAS instrumentation SRs and extension of a previously approved license amendment implementation period are purely administrative in nature, and as such, do not increase the probability of any accident previously evaluated. The proposed changes do not affect accident initiators or precursors nor alter the design assumptions, conditions, or configuration of the facility or the manner in which the plant is operated and maintained. The proposed changes will not modify any system interface, nor will they affect the probability of any event initiators. Therefore, the proposed changes do not increase the probability of an accident previously evaluated.

   Since the proposed changes are purely administrative, the changes will not alter or prevent structures, systems, and components from performing their intended function to mitigate the consequences of an initiating event, within the assumed acceptance limits. The proposed amendment does not change the response of the plant to any accidents and has no impact on the reliability of the ESFAS signals. The ESFAS will remain highly reliable, and the proposed changes will not result in an increase in the risk of plant operation. There will be no degradation in the performance of, or an increase in the number of challenges imposed on safety-related equipment assumed to function during an accident situation. The proposed changes do not affect the source term, containment isolation, or radiological release assumptions used in evaluating the radiological consequences of any accident previously evaluated. Therefore, there will not be an increase in the consequences of any accidents.

2. **The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.**
The proposed revision to the numbering of two ESFAS instrumentation SRs and extension of a previously approved license amendment implementation period are purely administrative in nature. There are no hardware changes nor are there any changes in the method by which any safety-related plant system performs its safety function. The proposed changes will not affect the normal method of plant operation. No performance requirements will be affected or eliminated. The proposed changes will not result in physical alteration to any plant system nor will there be any change in the method by which any safety-related plant system performs its safety function. There will be no setpoint changes or changes to accident analysis assumptions.

   No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures are introduced as a result of these changes. There will be no adverse effect or challenges imposed on any safety-related system as a result of these changes. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. **The proposed changes do not involve a significant reduction in a margin of safety.**
   The proposed revision to the numbering of two ESFAS instrumentation SRs and extension of a previously approved license amendment implementation period are purely administrative in nature. Therefore, the proposed changes do not affect the acceptance criteria for any analyzed event, nor is there a change to any safety analysis limit. There will be no effect on the manner in which safety limits, limiting safety system settings, or limiting conditions for operation are determined nor will there be any effect on those plant systems necessary to assure the accomplishment of protection functions. There will be no impact on the departure from nucleate boiling limits, fuel centerline temperature, or any other margin of safety.

   Redundant ESFAS trains are maintained, and diversity with regard of the signals that provide engineered safety features actuation is also maintained. All signals credited as primary or secondary, and all operator actions credited in the accident analyses will remain the same. The proposed changes will not result in plant operation in a configuration outside the design basis. Therefore, the proposed changes do not involve a significant reduction in the margin of safety.

Based on the above analysis, EGC has concluded that the proposed amendment involves no significant hazards consideration under the standards set forth in 10 CFR 50.92(c) and, accordingly, a finding of "no significant hazards consideration" is justified.

## 5.2 Applicable Regulatory Requirements/Criteria

The proposed revision to the numbering of two ESFAS instrumentation SRs and extension of a previously approved license amendment implementation period are purely administrative in nature.

Since the proposed changes are purely administrative, there will be no changes to the ESFAS instrumentation design such that compliance with any applicable regulatory requirements and guidance documents above would come into question. This confirms that the plant will continue to comply with all applicable regulatory requirements.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 6.0 ENVIRONMENTAL CONSIDERATION

EGC has evaluated this proposed license amendment consistent with the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21, "Criteria for and identification of licensing and regulatory actions requiring environmental assessments."

EGC has determined that these proposed changes meet the criteria for categorical exclusion set forth in paragraph (c)(9) of 10 CFR 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review," and has determined that no irreversible consequences exist in accordance with paragraph (b) of 10 CFR 50.92, "Issuance of amendment."

This determination is based on the fact that these changes are being processed as an amendment to the license issued pursuant to 10 CFR 50, "Domestic Licensing of Production and Utilization Facilities," which changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, "Standards for Protection Against Radiation," or which changes an inspection or surveillance requirement and the amendment meets the following specific criteria:

1. **The amendment involves no significant hazards consideration.**
   As demonstrated in Section 5.1 above, "No Significant Hazards Consideration," the proposed changes do not involve any significant hazards consideration.

2. **There is no significant change in the types or significant increase in the amounts of any effluent that may be released offsite.**
   The proposed changes are an administrative renumbering of two ESFAS instrumentation SRs and extension of a previously approved license amendment implementation period. Therefore, the proposed changes will not result in an increase in power level, and will not increase the production nor alter the flow path or method of disposal of radioactive waste or byproducts; thus, there will be no change in the amounts of radiological effluents released offsite. Therefore, the proposed changes will not result in a significant change in the types or significant increase in the amounts of any effluent released offsite.

3. **There is no significant increase in individual or cumulative occupational radiation exposure.**
   The proposed changes will not result in any changes to the configuration of the facility. The administrative renumbering of two ESFAS instrumentation SRs and extension of a previously approved license amendment implementation period will not cause a change in the level of controls or methodology used for the processing of radioactive effluents or handling of solid radioactive waste, nor will the proposed changes result in any change in the normal radiation levels in the plant. Therefore, there will be no increase in individual or cumulative occupational radiation exposure resulting from these changes.

## 7.0 REFERENCES

1. Letter from D. M. Benyak (Exelon Generation Company, LLC) to U. S. NRC, "Application for License Amendment: Implementation of WCAP-14333 and WCAP-15376, Reactor Trip System Instrumentation and Engineered Safety Feature Actuation System Instrumentation Test Times, Completion Times and Surveillance Test Intervals," dated January 8, 2007

2. Letter from M. M. Thorpe-Kavanaugh (U. S. NRC) to C. G. Pardee (Exelon Generation Company, LLC), "Byron Station, Unit Nos. 1 and 2, and Braidwood Station, Units 1 and 2 - Issuance of Amendments RE: Technical Specification Request to Extend Reactor Trip System and Engineered Safety Features Actuation System Completion Times, Bypass Test Times, and Surveillance Test Intervals (TAC Nos. MD4009, MD4010, MD4011, and MD4012)" dated January 29, 2008

**ATTACHMENT 2A**

Braidwood Station, Units 1 and 2
NRC Docket Nos. 50-456 and 50-457
Facility Operating License Nos. NPF-72 and NPF-77
Marked-up Technical Specification Page

3.3.2-7

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE | | FREQUENCY |
|---|---|---|
| SR 3.3.2.4 | Perform ACTUATION LOGIC TEST. | 92 days on a STAGGERED TEST BASIS |
| SR 3.3.2.5 | Perform MASTER RELAY TEST. | 92 days on a STAGGERED TEST BASIS |
| SR 3.3.2.6 7 | ----------NOTE----------<br>Verification of relay setpoints not required.<br>----------<br><br>Perform TADOT. | 92 days |
| SR 3.3.2.7 6 | Perform COT. | 184 days |
| SR 3.3.2.8 | Perform SLAVE RELAY TEST. | 18 months |
| SR 3.3.2.9 | ----------NOTE----------<br>Verification of setpoint not required.<br>----------<br><br>Perform TADOT. | 18 months |

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**ATTACHMENT 2B**

Byron Station, Units 1 and 2
NRC Docket Nos. 50-454 and 50-455
Facility Operating License Nos. NPF-37 and NPF-66
Marked-up Technical Specification Page

3.3.2-7

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE | | FREQUENCY |
|---|---|---|
| SR 3.3.2.4 | Perform ACTUATION LOGIC TEST. | 92 days on a STAGGERED TEST BASIS |
| SR 3.3.2.5 | Perform MASTER RELAY TEST. | 92 days on a STAGGERED TEST BASIS |
| SR 3.3.2.6 | ----------NOTE----------<br>Verification of relay setpoints not required.<br>----------<br><br>Perform TADOT. | 92 days |
| SR 3.3.2.7 | Perform COT. | 184 days |
| SR 3.3.2.8 | Perform SLAVE RELAY TEST. | 18 months |
| SR 3.3.2.9 | ----------NOTE----------<br>Verification of setpoint not required.<br>----------<br><br>Perform TADOT. | 18 months |

(continued)