Exelon Generation Company, LLC
1400 Opus Place
Downers Grove, IL 60515-5701

www.exeloncorp.com

Exelon Nuclear

RS-01-053

March 23, 2001

U. S. 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: Response to Request for Additional Information for Technical Specifications Change to Extend the Surveillance Test Interval for Solid State Protection System Slave Relays

References: (1) Letter from R. M. Krich (Commonwealth Edison Company) to US NRC, "Request for Technical Specifications Change to Extend the Surveillance Test Interval for Solid State Protection System Slave Relays from 92 Days to 18 Months," dated November 7, 2000

(2) Letter from M. Chawla (US NRC) to O. D. Kingsley (Exelon Generation Company, LLC), " Request for Technical Specifications Change to Extend the Surveillance Test Interval for Solid State Protection System Slave Relays from 92 Days to 18 Months for Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2," dated March 8, 2001

In the Reference 1 letter, in accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC, formerly the Commonwealth Edison (ComEd) Company, requested 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 extended the surveillance test interval for solid state protection system slave relays.

The NRC subsequently issued a Request for Additional Information (RAI) letter in Reference 2. The RAI letter requested that additional information be provided within 30 days after receipt of the letter (i.e., by April 9, 2001). The requested additional information is provided in the Attachment to this letter.

A001

Should you have any questions concerning this letter, please contact Ms. Kelly M. Root at (630) 663-7292.

Respectfully,

R. M. Krich
Director - Licensing
Mid-West Regional Operating Group

Attachment: Additional Information Related to Request for Technical Specifications Change to Extend the Surveillance Test Interval for Solid State Protection System Slave Relays

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

Attachment

Braidwood Station, Units 1 and 2
Byron Station, Units 1 and 2
Additional Information Related to Request for Technical Specifications Change to Extend the Surveillance Test Interval for Solid State Protection System Slave Relays

Question 1
The licensee's submittal does not define whether AR relays with DC coils are included in the request for surveillance test interval extension. It should be noted that Westinghouse Owners Group Topical report (WCAP-13877) does not cover AR relays with DC coils. Therefore, if AR relays with DC coils are to be included in the extension request, please provide the basis for extending the applicability of the topical report to these relays which should be similar to the analysis for AC relays. Also, Attachment E of the submittal does not discuss the similarity of the relays in the topical reports to the relays in the plant. Therefore, please discuss the similarity of the slave relays at Byron and Braidwood to the relays discussed in the topical report.

Response to Question 1
We did not address Westinghouse Type AR slave relays with DC coils in our Technical Specifications (TS) Change Request since the Westinghouse Electric Company, LLC Topical Reports (i.e., WCAP-13877, "Reliability Assessment of Westinghouse Type AR Relays Used as SSPS Slave Relays," WCAP-13878, "Reliability Assessment of Potter & Brumfield MDR Series Relays," and WCAP-13900, "Extension of Slave Relay Surveillance Testing Intervals") do not address slave relays with DC coils. There are no Westinghouse Type AR slave relays with DC coils in the Solid State Protection System (SSPS) at the Braidwood and Byron Stations. However, the Westinghouse Topical Reports cited in the TS Change Request (i.e., WCAP-13877, WCAP-13878, and WCAP-13900) are applicable to the Westinghouse Type AR slave relays with AC coils and the Potter & Brumfield MDR Series slave relays with AC coils, which are the types of slave relays used in the SSPS at the Braidwood and Byron Stations. In addition, the applicability analyses performed to address NRC Item 1 in Attachment E confirmed that the slave relays used in the SSPS at the Braidwood and Byron Stations are identical to those evaluated in the referenced Westinghouse Topical Reports. We are not proposing any deviations from these Westinghouse Topical Reports and, therefore, have not included AR relays with DC coils in our TS Change Request.

Question 2
The licensee plans to extend the applicability of the topical reports to the future acquisition of relays which will be used to replace existing relays. It is the staff's understanding that these relays could be purchased from any vendor and could be of a different model. To date, the staff feels that the licensee has not provided sufficient justification to support this part of their request. Please provide additional justification (detailed acceptance criteria) for future relay replacements or amend the request to delete the paragraph regarding future relay replacements, and provide the new replacement technical specifications pages.

Response to Question 2
In the letter from R. M. Krich (Commonwealth Edison Company) to US NRC, "Request for Technical Specifications Change to Extend the Surveillance Test Interval for Solid

State Protection System Slave Relays from 92 Days to 18 Months," dated November 7, 2000, we proposed extending the applicability of the Westinghouse Topical Reports to the surveillance test interval for future replacement SSPS slave relays. In our TS Change Request we stated that, "Future slave relay replacement types will meet the acceptance criteria for the reliability assessments performed in accordance with the NRC approved methodology described in WCAP-13877, WCAP-13878 and WCAP-13900." Therefore, it is our opinion that we did provide sufficient justification to support this part of our request. However, after further consideration and in order to avoid any further issues, we are withdrawing the proposed extension of the surveillance test interval for future replacement SSPS slave relays from the TS change request and from the TS Bases. The proposed TS are unaffected by this change. The proposed TS Bases will be revised in accordance with the provisions of TS 5.5.14, "Technical Specifications (TS) Bases Control Program." Therefore, since the TS Bases were provided for information only, revised TS Bases are not included.

Question 3
The licensee has requested to extend the topical report for the Containment Ventilation Isolation System without providing enough justification. In order for the staff to determine the acceptability of the request, please provide details to justify the applicability of the topical report to these relays.

Response to Question 3
We are not requesting "to extend the topical report for Containment Ventilation Isolation System." The SSPS slave relays associated with the Containment Ventilation Isolation System are addressed in the Westinghouse Topical Reports WCAP-13877, WCAP-13878, and WCAP-13900. The Westinghouse Topical Reports WCAP-13877, WCAP-13878, and WCAP-13900 are applicable to the Westinghouse Type AR slave relays with AC coils and the Potter & Brumfield MDR Series slave relays with AC coils, which are the types of slave relays used in the SSPS at the Braidwood and Byron Stations. The Containment Ventilation Isolation System slave relays are a subset of the SSPS slave relays discussed above. Therefore, the referenced Westinghouse Topical Reports apply to the Containment Ventilation Isolation System slave relays.

Note that the TS markups in WCAP-13900 are based on NUREG-0452, "Standard Technical Specifications for Westinghouse Pressurized Water Reactor," Draft Revision 5, dated July 8, 1983. In NUREG-0452, the TS requirement for containment ventilation isolation instrumentation is in TS 3.3.2, "Engineered Safety Features Actuation System Instrumentation." In WCAP-13900, TS 3.3.2, Functional Unit 3c contains the markup for containment ventilation isolation instrumentation. The Braidwood and Byron Stations' TS are based on NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 1, dated April 7, 1995. In NUREG-1431, the TS requirement for containment ventilation isolation instrumentation was moved from the Engineered Safety Features Actuation System Instrumentation TS to TS 3.3.6, "Containment Ventilation Isolation Instrumentation." The requirements in NUREG-0452 and in NUREG-1431 for performing a slave relay test for containment ventilation isolation instrumentation are identical. Only the location of the requirements is different. Additionally, the same change was approved in Amendment 17 for Watts Bar Nuclear Plant, Unit 1, on December 30, 1998.