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July 19, 1995

U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Attn: Document Control Desk

Subject:

Dresden Nuclear Power Station Units 2 and 3 Quad Cities Nuclear Power Station Units 1 and 2

Supplemental Application for Amendment to Facility Operating Licenses DPR-19, DPR-25, DPR-29 and DPR-30, Appendix A, Technical Specifications

NRC Docket Nos. 50-237/249 and 50-254/265

References:

- (a) P. Piet letter to T. Murley, dated July 29, 1992.
- (b) P. Piet letter to U.S. NRC, dated May 9, 1995.

In the Reference (a) letter, pursuant to 10 CFR 50.90, Commonwealth Edison (ComEd) proposed to amend Appendix A, Technical Specifications to Facility Operating Licenses DPR-19, DPR-25, DPR-29 and DPR-30. The proposed amendment reflected ComEd's efforts to upgrade existing Technical Specifications Sections 1.0, "Definitions," Section 3/4.0, "Applicability," and Section 3/4.3, "Reactivity Controls."

As discussed in Reference (b), current Technical Specification (CTS) 4.3.C.2 for Dresden and Quad Cities Stations requires that all control rods be scram time tested after each refueling outage, and that 50% of the control rods be measured for scram times not more frequently than 16 weeks nor less frequently than 32 weeks. The present requirements are replaced with proposed Surveillance Requirement (SR) 4.3.D.3, which is based on BWR-STS 4.1.3.2.c (NUREG 0123, Draft Rev. 4), and requires at least 10% of the control rods, on a rotating basis, to be scram time tested at least once per 120 days of reactor power operation. In addition, the provisions in Quad Cities CTS 4.3.C.2, which require an annual scram test of all control rods, have not been retained within the proposed TSUP 4.3.D. As previously discussed, the present requirements are replaced with proposed SR 4.3.D.3, which is based on BWR-STS 4.1.3.2.c, and requires at least 10% of the control rods, on a rotating basis, to be scram time tested at least once per 120 days of reactor power operation.

The scram time testing requirement of proposed SR 4.3.D.3 has been proven to be successful within the industry for detecting scram time deterioration at operating BWRs with control rod drive systems similar in design to that of Dresden and Quad Cities. The population of the control rods which are subjected to scram timing will be reduced as a result of adopting the BWR-STS SR for scram timing, thus reducing unnecessary, excessive wear to the CRDs. The large number of significant control rod moves imposes a large, extended power reduction and movement of many more control rods. These result in additional and unnecessary challenges to fuel cladding (thermal

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cycles) and control rod positioning. In addition, the extent and time of the load drop induces a core xenon transient that further complicates reactor recovery, making the surveillance evolution a significant challenge to the plant and reactivity management while adding minimal data to the extensive performance database.

The reduction in the population of control rods which are subjected to scram timing does not have an adverse effect on the Minimum Critical Power Ration (MCPR) Safety Limit, thus the current licensing basis remains unaffected.

CTS 4.3.C.2 also includes provisions to perform an evaluation after completion of control rod drive scram tests. These provisions are deleted from proposed SR 4.3.D.3, since the proposed SRs require, through their performance, evaluations of control rod drive scram tests. Thus, the evaluations will continue to be performed, yet controlled by administrative methods outside of the Technical Specifications. The current requirement to submit the results of the scram time tests in the annual operating report to the NRC staff has also been deleted. This requirement is obsolete and unnecessary for inclusion as a Technical Specification requirement. However, scram time data disposition will continue to be performed, thus the current licensing basis remains unaffected.

ComEd requests expedited approval of the proposed Section 4.3.D.3 from the Reference (a) submittal, outside of the TSUP program, for Dresden and Quad Cities Stations. Proposed TS 4.3.D.3 would replace CTS 4.3.C.2. ComEd is requesting this expedited approval in order to support scheduled CRD scram time testing at Dresden and Quad Cities Station in August 1995.

For Dresden Station, the proposed change will first affect the completion of the Surveillance Requirements for Unit 3. For Dresden Unit 3, 50% of the control rods were scram time tested, at power, on March 23, 1995. This schedule would then require scram time testing of 50% of the Unit 3 control rods prior to reaching 30% power during the restart of Unit 3. The approval of proposed SR 4.3.D.3 (as a replacement for CTS 4.3.C.2) will be required by August 11, 1995, in order to accomplish the transition to the new specification (thus allowing 10% scram time testing of control rods). The implementation of the proposed scram time testing requirement will minimize excessive wear to the CRDs, reduce the extent of the power reduction associated with CRD scram time testing (and the accompanying core xenon transient), and reduce unnecessary challenges to fuel cladding (thermal cycles) and control rod positioning. The minimization of unnecessary challenges to fuel cladding is additionally important in order to minimize the challenges to a known pin-hole fuel leak in the Dresden Unit 3 reactor core. If the proposed amendment is not approved for Dresden Station by August 11, 1995, ComEd will be required to perform 50% testing of Dresden Unit 3 control rods in order to ensure compliance with the Technical Specifications. In either case, ComEd will ensure full compliance with the Technical Specification requirements.

For Quad Cities Station, the proposed change will first affect the completion of the Surveillance Requirements for Unit 1. For Quad Cities Unit 1, all control rods were scram time tested, at power, on January 15, 1995. This establishes a required completion date of August 27, 1995 to have scram time tested 50% of the Quad Cities Unit 1 control rods. The approval of proposed SR 4.3.D.3 (as a replacement for CTS 4.3.C.2) will be required by August 20, 1995, in order to to accomplish the transition to the new specification (thus allowing 10% scram time testing of control rods). The implementation of the proposed scram time testing requirement will minimize excessive wear to the CRDs, reduce the extent of the power reduction associated with CRD scram time testing (and the accompanying core xenon transient), and reduce unnecessary challenges to fuel

cladding (thermal cycles) and control rod positioning. If the proposed amendment for Quad Cities Station is not approved by August 20, 1995, ComEd will be required to perform 50% testing of Quad Cities Unit 1 control rods in order to ensure compliance with the Technical Specifications. In either case, ComEd will ensure full compliance with the Technical Specification requirements.

By extracting proposed TS Section 4.3.D.3 from the Reference (a) submittal, the original finding of No Significant Hazards Consideration is unaffected by this supplemental application. The supplemental requirements are equivalent to those specified in the Reference (a) submittal.

This supplemental request is purely schedular in nature and as such, does not change the findings that the proposed supplemental application does not involve a significant increase in the probability or consequences of an accident previously evaluated; or create the possibility of a new or different kind of accident from any accident previously evaluated; or involve a significant reduction in a margin of safety. The NRC staff's original findings and basis for a no significant hazards determination was published in Federal Register, Volume 58, Number 119, on June 23, 1993 (pages 34071-34073) and remains unaffected by ComEd's proposed supplemental request.

Attachment A to this letter provides marked-up Technical Specification pages for Dresden Station (DPR-19 and DPR-25) and Quad Cities Station (DPR-29 and DPR-30) which incorporate the proposed change. Attachment B to this letter provides retyped Technical Specification pages for Dresden and Quad Cities Station.

To the best of my knowledge and belief, the statements contained in this document are true and correct. In some respects these statements are not based on my personal knowledge, but on information furnished by other ComEd employees, contractor employees, and/or consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

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

If there are any questions concerning this matter, please contact this office.

Respectfully,

John L. Schrage

Nuclear Licensing Administrator

OFFICIAL SEAL
JACQUELINE T EVANS
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES: 12/15/97

Attachments

cc:

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