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Dresden Generating Station
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December 6, 1996

JSPLTR 96-0229

U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, DC 20555

**SUBJECT: Dresden Nuclear Power Station Units 2 and 3
Quad Cities Nuclear Power Station Units 1 and 2
Request for Amendment to Facility Operating Licenses DPR-19,
DPR-25, DPR-29 and DPR-30, Appendix A,
Technical Specifications (TS),
Changes to Technical Specification 3/4.10.A, "Reactor Mode
Switch," and Table 1-2, "OPERATIONAL MODES"
NRC Docket Nos. 50-237/249 and 50-254/265**

Pursuant to 10 CFR 50.90, ComEd proposes to amend Appendix A, Technical Specifications 3/4.10.A and Table 1-2, of Facility Operating Licenses DPR-19, DPR-25, DPR-29 and DPR-30. The purpose of this amendment request is to amend the aforementioned requirements to allow a single control rod to be moved when the plant is in the HOT SHUTDOWN or COLD SHUTDOWN Condition provided that the one-rod-out interlock is OPERABLE and the Reactor Mode Switch is in the Refuel position. The proposed changes are based upon the precedent set forth in Niagara Mohawk Corporation's Nine Mile Point Unit 2 submittal (Docket No. 50-410, dated February 12, 1993) as approved by the NRC staff on May 10, 1993 (Amendment No. 40 to Facility Operating License NPF-69), and other BWR operating license amendments referenced therein. The changes are also patterned after allowances provided in NUREG 1433, Rev. 1 which permit similar actions.

The proposed Technical Specification Amendment is subdivided as follows:

1. Attachment A gives a description and safety analysis of the proposed changes.
2. Attachment B includes the proposed changes to the Technical Specifications pages, including marked-up versions of the current pages.
3. Attachment C describes ComEd's evaluation performed in accordance with 10 CFR 50.92 (c), which confirms that no significant hazards consideration is involved. In addition, ComEd's Environmental Assessment Applicability Review is included.

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PDR

This proposed Technical Specification amendment has been reviewed and approved by ComEd On-Site and Off-Site Review in accordance with ComEd procedures.

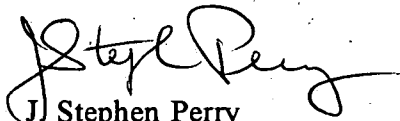
ComEd requests NRC approval of this request by February 28, 1997, with the amendment to be effective no later than 60 days following approval. Approval of this amendment allows Dresden and Quad Cities the opportunity to implement the revised requirements for control rod movement during planned upcoming refueling operations.

To the best of my knowledge and belief, the statements contained above are true and correct. In some respect these statements are not based on my personal knowledge, but obtained information furnished by other Commonwealth Edison employees, contractor employees, and 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 application for amendment by transmitting a copy of this letter and its attachments to the designated state official.

Please direct any questions you may have concerning this submittal to this office.

Sincerely,

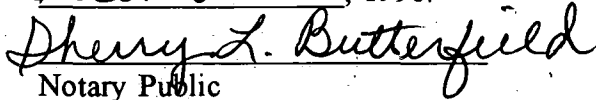


J Stephen Perry
Vice President
Dresden Station

Subscribed and Sworn to before me

on this 5 day of

December, 1996.


Notary Public

Attachments:

- A. Description and Safety Analysis of the Proposed Changes
- B. Marked-Up Technical Specification Pages
- C. Evaluation of Significant Hazards Considerations and Environmental Assessment Applicability Review

- cc:
- A. Bill Beach, Regional Administrator - RIII
 - C. G. Miller, Senior Resident Inspector - Quad Cities
 - C. L. Vanderniet, Senior Resident Inspector - Dresden
 - R. M. Pulsifer, Project Manager - NRR
 - J. F. Stang, Project Manager - NRR
 - Office of Nuclear Facility Safety - IDNS
 - R. J. Singer, MidAmerican Energy Company
 - D. C. Tubbs, MidAmerican Energy Company

ATTACHMENT A
Description and Safety Analysis of the Proposed Change

Description of the Proposed Change

Pursuant to 10 CFR 50.90, ComEd proposes to amend Appendix A, Technical Specifications 3/4.10.A, "Reactor Mode Switch," and Table 1-2, "OPERATIONAL MODES," of Facility Operating Licenses DPR-19, DPR-25, DPR-29 and DPR-30. The purpose of this amendment request is to allow a single control rod to be moved when the plant is in HOT SHUTDOWN or COLD SHUTDOWN condition provided that the one-rod-out interlock is OPERABLE and the Reactor Mode Switch is in the Refuel position. The proposed changes modify footnote (e) in Table 1-2 to state (additions in *italics*):

"The reactor mode switch may be placed in the Refuel position while a single control rod is being ~~recoupled or withdrawn~~ *moved* provided the one-rod-out interlock is OPERABLE."

The proposed changes also modify the Applicability of TS 3.10.A as specified below:

"OPERATIONAL MODE ~~5^{(a)(b)}~~ *MODE(s) 3^(a), 4^(a) and 5^{(b) (c)}*."

With footnote (a) being added and specified as:

"When the reactor mode switch is in the Refuel position."

Current footnotes (a), (b) and (c) are correspondingly renumbered to (b), (c) and (d), respectively throughout TS 3/4.10.A.

Description and Bases of the Current Technical Specification Requirement

Technical Specification Table 1-2 defines the reactor mode switch position and average coolant temperatures for the five OPERATIONAL MODES at Dresden and Quad Cities Stations. Footnote (e) in Table 1-2 is applicable only to OPERATIONAL MODES 3 and 4. In the existing specifications, this footnote permits the reactor mode switch to be placed in the refuel position with the plant shutdown and the reactor head tensioned while a single control rod is being recoupled, provided the one-rod-out interlock is OPERABLE. In addition, footnote (b) in Table 1-2 allows for a single control rod drive to be removed while in COLD SHUTDOWN in accordance with the provisions of Specification 3.10.I. These provisions allow a control rod to be uncoupled from its drive for drive replacement or maintenance without the reactor head being removed. However, the provisions do not explicitly permit venting or scram time testing of control rods in OPERATIONAL MODE 3 or 4.

Technical Specification 3/4.10.A does not currently explicitly address the OPERABILITY or testing of the one-rod-out interlock while operating in OPERATIONAL MODE 3 or 4. Footnote (e) of Table 1-2 requires the interlock to be OPERABLE, however the testing and functional requirements are not explicitly addressed.

Description of the Need and Bases for Amending the Technical Specifications

The mode switch in the Shutdown position blocks rod movement, hence the movement of the switch to Refuel (or to Startup or Run) is necessary to move a rod for recoupling (e.g., after repairs on the control rod drive) or other maintenance and testing activities. Rod movement with the mode switch in the Refuel position is limited to one rod by the redundant logic of the one-rod-out interlock.

The one-rod-out interlock associated with the refuel position of the reactor mode switch provides protection from reactivity excursions by assuring the reactor remains subcritical. This one-rod-out restriction is enforced by redundant logic circuits that use the all-rods-in signal and a rod selection signal to prevent the selection of a second control rod for movement when any other control rod is not fully inserted. OPERABILITY of the one-rod-out interlock is required by TS 3.10.A for OPERATIONAL MODE 5 and for Special Test Exceptions allowed by TS 3.12.A and 3.12.B.

TS 3.3.A requires SHUTDOWN MARGIN (SDM) to be maintained in OPERATIONAL MODE(s) 1, 2, 3, 4 and 5. (SDM is the amount of reactivity by which the reactor would be subcritical assuming all control rods are fully inserted except for the single control rod having the highest reactivity worth, which is assumed fully withdrawn.) The one-rod-out interlock, together with the requirements for adequate SDM in OPERATIONAL MODES 1, 2, 3, 4, and 5, provides protection against reactivity excursions by preventing withdrawal of more than one control rod and by ensuring the core remains subcritical with any one control rod withdrawn.

TS Table 1-2 currently specifies very limited conditions under which a control rod may be withdrawn in OPERATIONAL MODE 3 or 4. Consequently, post-maintenance and surveillance testing on control rod drives is a potentially limiting, critical path activity during plant startup after a refueling outage. This proposed change to the Technical Specifications will permit the performance of control rod drive testing during COLD SHUTDOWN, thereby reducing the startup schedule.

The proposed change will increase the frequency of single control rod withdrawals in OPERATIONAL MODES 3 and 4 by expanding the allowance contained in footnote (e) of Table 1-2 to include the performance of maintenance and testing activities (e.g., control rod exercising). However it will not increase the probability of postulated withdrawal events since the withdrawals would be performed under existing TS in OPERATIONAL MODES 1, 2 or 5.

To ensure that the one-rod-out interlock is OPERABLE when required, the Applicability for TS 3/4.10.A is also revised to include OPERATIONAL MODES 3 or 4 with the reactor mode switch in the Refuel position. This revision expands the applicability of the testing requirements for the one-rod-out interlock to OPERATIONAL MODES 3 or 4 when the reactor mode switch is in the Refuel position.

The SDM required by TS 3/4.3.A ensures the reactor will be maintained subcritical even with the highest worth rod fully withdrawn. The one-rod-out interlock is automatically imposed whenever the reactor mode switch is placed in the refuel position. By expanding the applicability of specification 3/4.10.A, the revision will impose surveillance requirements to ensure the one-rod-out interlock is OPERABLE prior to allowing withdrawal of a control rod in OPERATIONAL MODES 3 and 4. The provisions assure that the reactor will remain subcritical during single rod movement with the mode switch in the refuel position. These revisions are in accordance with previous staff approvals and existing Technical Specifications in other BWRs, provide needed flexibility for maintenance and testing of control rods, are not significantly different from the currently permitted operations of control rod withdrawal, and do not increase the probability of a control rod withdrawal event.

Based on the above discussion, there is reasonable assurance that operation of Dresden and Quad Cities Stations in the proposed manner will not endanger the public health and safety and that issuance of the proposed amendment will not be inimical to the common defense and security.

ATTACHMENT B
Marked-Up Technical Specification Pages

LICENSE DPR-19/25

<u>Remove</u>	<u>Insert</u>
1-9	1-9
3/4.10-1	3/4.10-1

LICENSE DPR-29/30

<u>Remove</u>	<u>Insert</u>
1-9	1-9
3/4.10-1	3/4.10-1

Environmental Assessment

ComEd has evaluated the proposed amendment against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that the proposed changes meet the criteria for a categorical exclusion as provided under 10 CFR 51.22 (c)(9). This conclusion has been determined because the changes requested do not pose significant hazards consideration and do not involve a significant increase in the amounts, and no significant changes in the types, of any effluents that may be released off-site. Additionally, this request does not involve a significant increase in individual or cumulative occupational radiation exposure.