



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

December 11, 1992

MEMORANDUM FOR: Frederick J. Hebdon, Director  
Project Directorate II-4  
Division of Reactor Projects I/II

FROM: Christopher I. Grimes, Chief  
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SUBJECT: USE OF SHUTDOWN TIMES FOR CORRECTIVE MAINTENANCE (TIA 92-08)

In a memorandum dated February 5, 1992, Region II requested generic guidance on a Technical Specification (TS) issue that arose at Sequoyah. This issue involves the intentional use of TS shutdown time to perform corrective maintenance when the TS allowed outage time (AOT) is insufficient or there is no AOT.

Region II noted that TS 3.0.2 is clear: completion of a shutdown is not required if repairs started during an AOT are not completed during the AOT but are completed during the shutdown time. The generic concern is, if the AOT is so short that repairs are impossible during that time period, can the licensee remove a component from service with the intention of completing the repair during the shutdown time, and risk a hasty plant shutdown if they subsequently find the repair cannot be completed in that time.

AOTs provide a reasonable time to perform corrective action that is limited by the safety importance of the associated limiting condition. Shutdown times, both those specified by the action statements and the general "3.0.3" shutdown requirement, provide a reasonable period to accomplish a controlled plant shutdown. However, the technical specifications do not specify how AOTs or shutdown times are to be used; that is, when or how specific actions may be taken within those periods. Successful corrective actions depend on many factors, including the configuration of the plant at the time, the availability of spare parts, adequacy of procedures, and training of plant personnel. The licensee is responsible for assessing all of these considerations and determining the appropriate course of action which is in the best interest of plant safety.

Circumstances may arise when plant safety is better served by delaying a shutdown action to provide a safer configuration for a shutdown transient or to avoid an unnecessary shutdown transient. If a licensee responsibly concludes that plant shutdown should be delayed or corrective action can be accomplished so that an unnecessary plant transient can be avoided, we believe that such a decision is permitted as long as the shutdown times specified by the TS are observed, including the "default" (3.0.3) provision, and no violation should be imposed.

Enclosure

If the licensee subsequently exceeds the shutdown times specified in the TS because of complicating factors, appropriate enforcement action should be taken. When a Level III action, or higher, is appropriate, the escalation and mitigation factors should be applied to the penalty depending upon the specific circumstances. If, in such cases, the licensee exceeds the specified shutdown time because of poor planning or failure to recognize plant conditions, and the licensee clearly delayed taking action after entry into the shutdown period, we would expect the enforcement action to apply the escalation of the penalty allowed under Appendix C of 10 CFR Part 2. In this regard, we note that many plant technical specifications refer to "preparing the plant for shutdown" during the shutdown period; such a requirement does not exist in the current standard TS and is sufficiently subjective that it is unenforceable. The Office of Enforcement concurs in the foregoing general position on the application of TS shutdown provisions.

With regard to the specific circumstances that occurred at Sequoyah, we note that the improved standard technical specifications (STS) include changes related to each of the three examples in the TIA. Specifically, the improved STS allow time to readjust safety valve settings at hot conditions prior to power escalation, which should reduce the need for corrective maintenance at full power. The AOT for the accumulator isolation valve closed has been increased from "immediate" to one hour. AOTs for other accumulator conditions have been increased from 1 hour to 72 hours. Therefore, the improved STS provide a basis upon which the licensee could modify its technical specification requirements to avoid these circumstances.

However, we also understand that the need for taking the accumulator out of service would not have occurred if an online method to drain off the check valve leakage had been provided. In the amendment request of February 14, 1991, the licensee concluded that an online method did not appear to be feasible as a near term solution to this problem. However, the Final Safety Analysis Report describes such an online draining capability as part of the system design. The licensee should reconcile this apparent discrepancy in the design capability of the accumulator system. Depending on the resolution of this issue, it may be appropriate to include a limit in the accumulator LCO for the maximum leakage for which the drain and fill procedure is acceptable, in addition to the leakage limit for the accumulator isolation valve as a pressure isolation valve.

  
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