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SUBJECT: Forwards application for proposed Amend 71 to License
 NPF-22 re exemption from TS Section 4.0.2.b.

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JUN 19 1989

Director of Nuclear Reactor Regulation
Attention: Dr. W.R. Butler, Project Director
Project Directorate I-2
Division of Reactor Projects
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUSQUEHANNA STEAM ELECTRIC STATION
PROPOSED AMENDMENT 71 TO LICENSE NPF-22
PLA-3193 FILES A17-2/R41-2

Docket No. 50-388

Dear Dr. Butler:

The purpose of this letter is to propose a one-time amendment to Facility Operating License NPF-22. The proposed amendment seeks exemption from the provisions of Section 4.0.2.b of Technical Specifications for those refuel interval surveillances for which performance is required by the end of the Unit 2 Third Refueling and Inspection Outage to ensure operability for the Susquehanna Steam Electric Station.

Technical Specification 4.0.2.b allows a required surveillance interval to be extended by as much as 25% provided that the combined extension time for three consecutive intervals does not exceed 3.25 times the specified time interval.

Susquehanna SES is faced with a scheduling problem for the Unit 2, Third Refueling and Inspection Outage. The problem is a direct result of an extraordinarily long first cycle run which was a consequence of unit performance and the startup program. Eighteen month surveillances were first performed during the Unit 1/Unit 2 tie-in outage, which occurred prior to Unit 2 commercial operation. The extended Unit 2 first fuel cycle resulted in refuel surveillance cycles which exceeded 18 months by a significant amount. Since these intervals exceeded 18 months, the amount of time in excess of 18 months was deducted from the 3.25 limit of Technical Specification 4.0.2.b. Our review of surveillance data indicates that subsequent surveillance cycles were generally maintained at approximately 18 months. Thus, over the last two surveillance cycles, equipment reliability has been maintained at high levels.

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The amendment proposed is a one time request in which extraordinary circumstances in the Unit 2 first cycle have caused surveillance scheduling difficulties over the three cycle period. This situation satisfies the criteria indicated in the final paragraph of Generic Letter 83-27, entitled "Surveillance Intervals in Standard Technical Specifications," dated July 6, 1983 (" . . . infrequent one time only changes may be granted for plant-specific conditions where adequate justification is given."). In no case is there exposure for any surveillance which cannot be performed in conditions 1, 2 or 3 exceeding the 1.25 maximum allowable surveillance interval for the third cycle for Unit 2.

Safety Analysis

Technical Specifications requiring surveillance interval extension are in the following categories:

Functional Tests

These tests are divided into the following categories:

- a) Logic System Functional Test (LSFT)
- b) Channel Functional Test (CFT)

A LSFT is a test of all logic components associated with the system to demonstrate the system functions as designed.

A CFT is a test which injects a signal into the logic channel to simulate a sensor trip and verify proper operation of the remaining portion of the trip channel.

We are requesting relief for the Logic System Functional Tests only. There is no safety significance to delaying these tests for a short period of time. All of the affected systems have functional tests and/or calibrations which have been tested within their Technical Specification surveillance frequency. These functional tests or calibrations verify operability of the instrumentation and/or components of which the logic system is a part. In many cases these tests cover the majority of the logic system. Since the parts of the systems which are more likely to fail (valves, instruments, etc.) are verified operable by current surveillances during the extension period, no significant impact on plant safety will occur.

Leak Rate Test

A test performed to verify that the leakage through valves is less than the value assumed in the system design.

Guidance is provided in Appendix J for primary reactor containment leakage testing which allows 2 years between tests. In addition to the requirements of 10 CFR 50 Appendix J, valve leak tests are specified in



Technical Specifications 3/4 4.3.2 to monitor leakage at high/low pressure interfaces. Technical Specification 4.0.2.a will be satisfied for all required tests even with the relief requested. Since this is less than 24 months, all Appendix J requirements will be met.

Other Tests

Electrical Tests:

These tests are performed on batteries, protective relays and overcurrent devices to demonstrate that these devices are capable of performing their design function.

Response Time Tests:

These tests are performed to verify the time delay incurred for a protective action on a particular system or instrument channel. The time delay is measured as the interval from the monitored parameter exceeding its trip setpoint at the channel sensor to the desired system/channel response.

Logic system functional tests, leak rate tests, and electrical tests are performed while the unit is in shutdown. Some of these tests, particularly those for batteries, would force the unit into shutdown to comply with Technical Specifications should we attempt to perform the test while operating. The remainder of these types of tests expose the unit to a relatively high probability of inadvertent transients.

Generic Letter 83-27 provides a discussion regarding the development of the 18-month surveillance intervals contained in Standard Technical Specifications. The generic letter recognizes that the bases for these intervals are founded upon operating experience and the knowledge that some reactors would be utilizing 18 month fuel cycles. To provide necessary operational flexibility, technical specifications have included a provision which permits any surveillance interval to be extended by 25% of the nominal interval provided that the total time interval does not exceed 3.25 times the specified surveillance interval over any three consecutive surveillance intervals.

The current criteria allows a 22.5 month interval for as many as one interval during a three interval period. Technical Specification 4.0.2.a has already accepted that a 22.5 month interval will provide a sufficient level of protection. The 3.25 surveillance interval extension criteria of Technical Specification 4.0.2 was not considered in the evaluation of the probability or severity of events analyzed in Chapter 15 of the FSAR. Relief, on a one time basis, from the requirement that any three consecutive intervals must not exceed 3.25 times the interval will not significantly effect equipment reliability.

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For Susquehanna, Unit 2, surveillance items that require surveillance interval extension will become due solely because of the requirements of the 3.25 maximum combined surveillance limit (Technical Specification 4.0.2.b). Given the proposed relief from the 3.25 maximum combined requirement, all surveillances on Unit 2 will be completed within the NRC allowable interval between any two surveillances allowed by Technical Specification 4.0.2.a.

No Significant Hazards Considerations

- I. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The 3.25 surveillance interval extension criteria of Technical Specification 4.0.2 was not taken credit for in the evaluation of the probability or severity of events analyzed in the plant accident analysis (FSAR Chapter 15).

Additionally, the 18 month refuel interval was originally chosen to correspond to expected operating cycle length such that these surveillances would be performed during the shutdown period (Reference Generic Letter 83-27). Since no technical basis is specified for the 18 month interval other than conformance with expected operating cycle length, deleting the 3.25 requirements for Unit 2 18 month surveillances on a one time basis does not involve a significant decrease in the effectiveness of the monitoring provision. Generic Letter 83-27 indicates that this is acceptable to the Staff ". . . for plant-specific conditions where adequate justification is given."

- II. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated since the refuel surveillance interval will still be constrained by the maximum 1.25 interval extension criteria of Technical Specification 4.0.2.
- III. The proposed change does not involve a significant reduction in a margin of safety. Deletion on a one-time basis of the requirement for three consecutive surveillance intervals not exceeding 3.25 times the interval from the refueling interval for Unit 2 18 month surveillances will not significantly effect equipment reliability. The current criteria allows a 22.5 month interval. By virtue of Technical Specification 4.0.2.a, the staff has already accepted that a 22.5 month interval will provide a sufficient level of protection.

Guidance has been provided in 51 FR 7744 for the application of standards to license change requests for determination of the existence of significant hazards considerations. This document provides examples of amendments which are and are not considered likely to involve significant hazards considerations. This proposed amendment does not involve a significant relaxation of the criteria used to establish safety limits, a significant relaxation of the bases for the limiting safety system settings or a significant relaxation of the bases for the limiting conditions for



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operations. Therefore, based on the guidance provided in the Federal Register and the criteria established in 10 CFR 50.92(e), the proposed change does not constitute a significant hazards consideration.

Implementation

The proposed change is required to support the Unit 2 Third Refueling and Inspection Outage, which is currently scheduled to begin on September 9, 1989. The first date on which a surveillance violation due to the requirements of Technical Specification 4.0.2 will occur is September 3, 1989. Therefore, it is requested that this change be approved prior to September 1, 1989 and be conditioned to become effective upon issuance.

Any questions on this submittal should be directed to Mr. W.W. Williams, at (215) 770-7910.

Very truly yours,



H. W. Keiser

cc: NRC Document Control Desk (original)
NRC Region I
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