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RECIP.NAME RECIPIENT AFFILIATION
BUTLER,W.R. Project Directorate I-2

SUBJECT: Forwards proposed Amends 148 & 102 to Licenses NPF-14 & NPF-22,respectively,changing TS re scheduling performance of Type A overall integrated leakage rate tests & requests exemption from 10CFR50,App J Section III.D.1(a).

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AUG 16 1991

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, DC 20555

**SUSQUEHANNA STEAM ELECTRIC STATION
PROPOSED AMENDMENT NO. 148 TO LICENSE
NO. NPF-14 AND PROPOSED AMENDMENT
NO. 102 TO LICENSE NPF-22:
CHANGES TO THE SSES UNITS 1 & 2
TECHNICAL SPECIFICATIONS FOR SCHEDULING
PERFORMANCE OF TYPE A OVERALL INTEGRATED
CONTAINMENT LEAKAGE RATE TESTS (ILRT), AND
REQUEST FOR EXEMPTION TO THE SCHEDULAR
REQUIREMENTS OF 10CFR50, APPENDIX J,
SECTION III.D.1(a).**

PLA-3633 **FILES A17-2, R41-2**

**Docket Nos. 50-387
and 50-388**

Dear Dr. Butler:

The purpose of this letter is to propose changes to the Susquehanna SES Units 1 and 2 Technical Specifications and to formally request an exemption to the scheduling requirements of 10CFR50, Appendix J, Section III.D.1(a).

BACKGROUND

Technical Specification Surveillance Requirement 4.6.1.2.a states: *"Three Type A Overall Integrated Containment Leakage Rate tests shall be conducted at 40 ± 10 month intervals during shutdown, at P_a 45.0 psig, during each 10 year service period. The third test of each set shall be conducted during the shutdown for the 10 year plant in-service inspection."*

A017
1/1

This requirement is in compliance with Appendix J of 10CFR50, Section III.D.1(a), which states that a set of three Type A tests shall be performed at "approximately equal intervals during each 10 year service period" with the third test of each set conducted when the plant is shutdown for the 10 year in-service inspections (ISI).

With a current operating cycle of 18 months, ILRT testing is required every other outage (nominally 36 months) to meet the 40 $\pm$ 10 month interval. Because this test schedule does not match up exactly with the 10 year ISI outage, back-to-back ILRTs would have to be performed in back-to-back outages.

DESCRIPTION OF CHANGE AND REQUEST FOR EXEMPTION

PP&L is proposing to revise Specification 4.6.1.2.a and associated bases such that a Type A Overall Integrated Containment Leakage Rate test is conducted at least once per 36 months with the provisions of Specification 4.0.2 applicable. See attached marked up pages.

In support of the proposed change, PP&L formally requests exemption to the schedular requirements of 10CFR50 Appendix J, Section III.D.1(a).

SAFETY ANALYSIS

With an 18 month operating cycle, ILRTs are required every other outage to comply with the Technical Specification 40 $\pm$ 10 month testing interval, however, this schedule does not coincide with the 10 year ISI. To fully comply with the Technical Specification requirement, back-to-back ILRTs would have to be performed in back-to-back outages.

For Unit 2 this schedule is illustrated as follows:

FRIO	Completed 6/86	
3RIO	Completed 11/89	
5RIO	Scheduled 11/92	
6RIO	Scheduled 5/94	* Ten Year Outage *

The current Unit 1 refueling outage schedule is impacted at 10 years and the same situation will be encountered at the 20 year outage.

For Unit 1 this schedule is illustrated as follows:

FRIO	Completed 6/85	
4RIO	Completed 6/89	
6RIO	Scheduled 5/92	
7RIO	Scheduled 11/93	* Ten Year Outage *
8RIO	Scheduled 5/95	
10RIO	Scheduled 5/98	
12RIO	Scheduled 5/01	
13RIO	Scheduled 11/02	* Twenty Year Outage *

10CFR50 Appendix J requirements provide for periodic verification by tests of the leak-tight integrity of the primary reactor containment, and systems and components which penetrate the primary containment, and establishes the acceptance criteria for these tests. The purposes of these tests are to assure that (1) leakage through the primary containment, and systems and components penetrating primary containment do not exceed allowable leakage rates specified in the Technical Specifications and associated Bases, and (2) periodic surveillance of primary containment penetrations and isolation valves is performed so that proper maintenance and repairs are made during the service life of the containment, and systems and components penetrating primary containment.

The ASME Boiler and Pressure Vessel Code, Section XI, provides requirements for the inservice inspection and test of ASME Code Class 1, 2 and 3 components, pumps, and valves. These component inspections, inservice tests for verifying operational readiness of pumps and valves whose function is required for safety, and piping system pressure tests, conducted at the 10 year intervals, comply with the requirements of 10CFR50.55a(g).

PP&L procedure AD-QA-547, "Nuclear Services Inservice Inspection Program", establishes administrative controls and defines functional unit interfaces necessary for the successful implementation of the ISI program. The procedure scope encompasses piping, welds, components, reactor pressure vessel, and erosion/corrosion inspections to satisfy the requirements of the ASME Boiler and Pressure Vessel Code, Section XI, the Technical Specifications, and applicable regulatory guidelines. The inspections themselves apply to non-destructive examinations (NDE), i.e. visual and volumetric tests, of the items previously mentioned. The snubber tests, system pressure tests, and pump and valve tests are excluded from the scope of this procedure. These tests and inspections are part of the scope of the Inservice Testing Program which also satisfies the requirements of the Technical Specifications and the ASME Boiler and Pressure Vessel Code, Section XI.

The requirement to perform the third Type A ILRT concurrent with the 10 year ISI stems from 10CFR50, Appendix J. The apparent basis for coupling the two types of tests is to assure that the three Type A tests are not grouped together during the first 90 months of each 10 year operating cycle.

From a safety perspective, the proposed 36 month test interval with the 25% allowance of Specification 4.0.2 is equivalent to the 40 $\pm$ 10 month test interval required by 10CFR50 Appendix J and is, in fact, more conservative over the life of the units. The proposed change to this interval within the Technical Specifications provides only flexibility in meeting the same requirement for three tests in 10 years. Since the testing type, acceptance criteria, and bases are not changed, the probability and consequences of accidents previously evaluated are not increased. The proposed change continues to provide for primary containment testing consistent with the requirements of Appendix J, therefore the margin of safety is not impacted nor decreased.

The proposed change does not affect the physical containment structure, the systems and components penetrating primary containment, or the facility. The change requires performance of Type A testing on a more frequent basis. It provides a more practical schedule for performance of the ILRTs. Test performance at a 36 month interval provides the same level of confidence that primary containment integrity is maintained.

Based upon the evaluation provided above, the change will not affect the safe operation of SSES since it does not reduce any requirement for primary containment integrity as imposed by the Technical Specifications or 10CFR50 Appendix J, nor any 10 year ISI requirements as imposed by Section XI of the ASME Code and 10CFR50.55a(g).

In conjunction with the exemption to Appendix J, it eliminates unnecessary testing in successive plant outages while providing the desired level of testing as required by the Technical Specifications and 10CFR50 Appendix J. The change affects the scheduling of only one of the three Type A tests during each 10 year service period. The scheduling and performance of the remaining tests would not be affected. The manner in which the Type A tests are performed and the applicable acceptance criteria would remain unchanged. 10 CFR 50, Appendix J requirements will continue to be met with an exception to the schedular requirements of Section III.D.1(a).

NO SIGNIFICANT HAZARDS CONSIDERATIONS

I. ***This proposal does not involve a significant increase in the probability or consequences of an accident previously evaluated.***

The coupling of the ILRT to the ISI is not due to any known technical requirements and does not enhance the purpose of the Type A test nor does it provide any additional

assurance of containment integrity. This coupling has not been assumed in any safety analysis.

The proposed change would allow the third test of each set to be conducted during a separate outage. The requirement to perform the two tests during the same outage stems from 10CFR50, Appendix J. The apparent basis for coupling the two types of tests is to assure that the three Type A tests are not grouped together during the first 90 months of each 10 year operating cycle. The proposed change would allow the 10 year Containment ILRT to be performed independent of the 10 year ISI. The manner in which the tests are performed as well as their respective acceptance criteria would remain unchanged.

II. ***This proposal does not create the possibility of a new or different type of accident from any accident previously evaluated.***

Decoupling the Appendix J test from the 10 year ISI outage imposes no new requirements on plant operation or testing.

Operation of the plant in accordance with the proposed change remains bounded by existing safety analyses. The proposed change would only affect the scheduling of one of the three Type A tests during each 10 year service period. The scheduling and performance of the remaining Type A tests would not be affected. Actual test methods and acceptance criteria remain unchanged. There is no identified safety significance associated with the coupling of the two programs during the same outage.

III. ***This change does not involve a significant reduction in a margin of safety.***

Appendix J testing and ISI are not related with respect to any safety margin and decoupling these two programs from the same outage in no way reduces the margin of safety associated with either program.

The proposed change would allow the third Containment ILRT during each 10 year service period to be conducted during a separate outage from the plant 10 year ISI. The actual test methods and procedures used to demonstrate containment leakage rates would not be affected. Appendix J requirements will continue to be met with an exemption to the schedular requirements of Section III.d.1(a).

ENVIRONMENTAL CONSEQUENCES

No change to the design basis of Susquehanna is being proposed by this change, therefore, no environmental consequences that have not been considered previously are anticipated.

IMPLEMENTATION

PP&L requests the proposed changes and requested exemption be approved prior to the Unit 2 5th refueling and inspection outage presently scheduled for November 1992. This will be the next planned occurrence of this unit's ILRT.

Any questions regarding this request should be directed to Mr. R. R. Sgarro at (215) 774-7916.

Very truly yours,

H Keiser

H. W. Keiser

Attachment

cc: NRC Document Control Desk (original)
NRC Region I
Mr. J. J. Raleigh, NRC Project Manager - OWFN
Mr. G. S. Barber, NRC Sr. Resident Inspector - SSES
Mr. T. M. Gerusky, PA DER