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SUBJECT: Forwards request for amend to ITS approving use during Susquehanna SES Unit 2 eighth refueling & insp outage scheduled for 970315.

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**SUSQUEHANNA STEAM ELECTRIC STATION
PROPOSED AMENDMENT NO. 208 TO LICENSE
NO. NPF-14 AND PROPOSED AMENDMENT
NO. 167 TO LICENSE NO. NPF-22: SINGLE
CONTROL ROD WITHDRAWAL IN HOT
SHUTDOWN AND COLD SHUTDOWN**

PLA-4565 FILE R41-2

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

Pennsylvania Power & Light Company requests that two sections of the Improved Technical Specifications (ITS) which were submitted to the NRC in a letter (PLA-4488) dated August 1, 1996, be approved for use during Susquehanna SES Unit 2's Eight Refueling and Inspection Outage which is scheduled to begin on March 15, 1997. The two ITS sections are LCO 3.10.3, "Single Control Rod Withdrawal - Hot Shutdown" and LCO 3.10.4, "Single Control Rod Withdrawal - Cold Shutdown". This proposed amendment formats these ITS sections for use in the current Technical Specifications for both Susquehanna SES units and does not change the technical content of the ITS sections which have been submitted for public comment.

BACKGROUND

The current Technical Specifications do not allow the withdrawal of control rods in OPERATIONAL CONDITIONS 3 and 4 except for the purpose of coupling and uncoupling of control rods. The performance of withdrawing a single control rod for other purposes is desirable to improve control rod drive system performance, reduce the chance of reactivity control device manipulation errors and support outage objectives. The proposed change adds two Special Test Exceptions to the Technical Specifications. These Special Test Exceptions allow single control rod withdrawal in OPERATIONAL CONDITIONS 3 and 4 to perform control rod testing, scram timing and coupling integrity checks. The proposed changes have been submitted to the NRC as part of the Improved Technical Specifications (ITS) as Specifications 3.10.3 and 3.10.4.

A001

DESCRIPTION OF CHANGE

This change requests that Specifications 3.10.3 and 3.10.4 which were submitted as part of the ITS be approved for use in the current Technical Specifications for Susquehanna SES. The Specifications submitted as part of ITS have been re-formatted to fit the format of current Technical Specifications. If the ITS submittal referenced specific LCOs and the current Technical Specifications do not contain the same references, the LCO, action and surveillance requirements of the ITS submittal are included in their entirety and not referenced in the proposed changes.

For example, the ITS Sections reference LCO 3.9.2, "Refuel Position One-Rod-Out Interlock". However, in the current Technical Specifications an exact cross reference does not exist. Therefore, in the proposed change the entire LCO, Actions and Surveillance Requirements for ITS Section 3.9.2 are included in the requested changes to the current Technical Specifications. The following ITS Sections are also included in their entirety in these proposed changes: 3.9.4, "Control Rod Position Indication," and 3.9.5, "Control Rod Operability - Refueling".

Refer to the attached marked up Technical Specifications.

SAFETY ANALYSIS

The safety analysis submitted with the ITS submittal is not changed due to the formatting of the section for use with the current Technical Specifications for Susquehanna SES. The following is a summary of the analysis performed for the ITS submittal.

With the reactor mode switch in the Refuel position, the analyses for control rod withdrawal during refueling are applicable and provided the assumptions of these analyses are satisfied in OPERATIONAL CONDITIONS 3 and 4, these analyses will bound the consequences of an accident. Explicit safety analysis in FSAR Section 15.4.1, "Rod Withdrawal Error - Low Power," demonstrates that the functioning of the refueling interlocks and adequate Shutdown Margin (SDM) will preclude unacceptable reactivity excursions.

Refueling interlocks restrict the movement of control rods to reinforce operational procedures that prevent the reactor from becoming critical. These interlocks prevent the withdrawal of more than one control rod. Under these conditions, since only one control rod can be withdrawn, the core will always be shut down even with the highest worth control rod withdrawn if adequate SDM exists.

The control rod scram function provides backup protection in the event normal refueling procedures and the refueling interlocks fail to prevent inadvertent criticalities during refueling. Alternate backup protection can be obtained by ensuring that a five by five array of control rods, centered on the withdrawn control rod, are inserted and incapable of withdrawal (i.e., electrically or hydraulically disarmed). This alternate backup protection is required when removing a Control Rod Drive (CRD) because this removal renders the withdrawn control rod incapable of being scrammed.

NO SIGNIFICANT HAZARDS CONSIDERATIONS

I. Involve a significant increase in the probability or consequences of an accident previously evaluated.

With the reactor mode switch in the Refuel position, the analyses for control rod withdrawal during refueling are applicable and, provided the assumptions of these analyses are satisfied in OPERATIONAL CONDITIONS 3 and 4, these analyses will bound the consequences of an accident. Explicit safety analysis in FSAR Section 15.4.1.1 , "Rod Withdrawal Error - Low Power", demonstrates that the functioning of the refueling interlocks and adequate Shutdown Margin (SDM) will preclude unacceptable reactivity excursions. The proposal to format the ITS section submittals for use in the current Technical Specifications is administrative in nature. The formatting does not change any of the technical requirements that were evaluated in the ITS submittal. Therefore, neither the formatting of the ITS sections for use in the current Technical Specifications nor the technical requirements as submitted in the ITS involve a significant increase in the probability or consequences of an accident previously evaluated.

II. Create the possibility of a new or different kind of accident from any accident previously evaluated.

With the reactor mode switch in the Refuel position, the analyses for control rod withdrawal during refueling are applicable and, provided the assumptions of these analyses are satisfied in OPERATIONAL CONDITIONS 3 and 4, these analyses will bound the consequences of an accident. Explicit safety analysis in FSAR Section 15.4.1.1, "Rod Withdrawal Error - Low Power", demonstrates that the functioning of the refueling interlocks and adequate Shutdown Margin (SDM) will preclude unacceptable reactivity excursions. The proposal to format the ITS section submittals for use in the current Technical Specifications is administrative in nature. The formatting does not change any of the technical requirements that were evaluated in the ITS submittal. Therefore, neither the formatting of the ITS sections for use in the current Technical Specifications nor the technical requirements as submitted in the ITS create the possibility of a new or different kind of accident from any accident previously evaluated.

III. Involve a significant reduction in a margin of safety.

For the reasons discussed in items I and II above, as well as the Safety Assessment, neither the formatting of the ITS sections for use in the current Technical Specifications nor the technical requirements as submitted in the ITS involve a significant reduction in a margin of safety.

ENVIRONMENTAL CONSEQUENCES

The proposed Technical Specification changes are administrative in nature, and will therefore have no impact on the environment.

IMPLEMENTATION

Pennsylvania Power & Light Company requests that this change be approved by March 14, 1997, in order to support the Eight Refueling and Inspection Outage on Unit 2 and continued operation of Unit 1.

If you have any questions, please contact Mr. C. T. Coddington at (610) 774-7531.

Very truly yours,

R. G. Byram

Attachment

copy: NRC Region I
Mr. K. Jenison, NRC Sr. Resident Inspector
Mr. C. Poslusny, Jr. NRC Sr. Project Manager
Mr. W. P. Dornsife, PA DEP