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SCHWENCER,A. Licensing Branch 2

SUBJECT: Forwards application for amends 61 & 15 to Licenses NPF-14 & NPF-22,respectively,changing Tech Specs to support installation of NRC-approved automatic depressurization sys logic mods.

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JAN 31 1985

Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUSQUEHANNA STEAM ELECTRIC STATION
PROPOSED AMENDMENTS 61 to NPF-14 AND
15 TO NPF-22
ER 100450 FILE 841-8 Docket Nos. 50-387
PLA-2401 50-388

Dear Mr. Schwencer:

The purpose of this letter is to propose changes to the Susquehanna SES Unit 1 and Unit 2 Technical Specifications in order to support the installation of NRC-Approved ADS logic modifications. Our review of the affected specifications indicated the need for several other changes as well, and these are explained in detail below.

Proposed Technical Specification Changes: A mark-up of the changes needed to support this proposal is attached. In the justification below, each page listed covers both the Unit 1 and Unit 2 specifications.

o page 3/4 3-28: The circled changes (Unit 1 only) are from previously proposed Amendment 43. They are provided for information only. The only change on this page removes footnote (a) from applying to every entry. Footnote (a) states:

> "A channel may be placed in an inoperable status for up to 2 hours for required surveillance without placing the trip system in the tripped condition provided at least one OPERABLE channel in the same trip system is monitoring that parameter."

This footnote no longer applies to the manual initiation functions for each ECCS System, since there is only one manual initiation channel per trip system. The manual initiation function is tested once per 18 months and can be done without rendering a required system inoperable, so the footnote is not necessary.

This footnote has also been removed from the Level 8 HPCI trip, since placing a channel in an inoperable status in this two-out-of-two series logic would render HPCI unavailable.

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With respect to the following, see FSAR Figure 7.3-5 sheet 3, attached.

o page 3/4 3-29: The addition of the ADS Drywell Pressure Bypass Timer and Manual Inhibit Switch in the Unit 1 Specification and the Manual Inhibit Switch alone in the Unit 2 Specification (the Timer is already included) is being performed consistent with our commitments to the NRC on NUREG-0737 Item II.K.3.18 and the related license conditions (Unit 1: 2.C(28)(e); Unit 2: 2.C.(12)(f)).

In the Minimum Operable Channels Per Trip System column, footnote (a) has been replaced with footnote (f). This is because under (a) surveillances could not be performed without entering an LCO, since another OPERABLE channel in the <u>same</u> trip system was not available. Unlike the other ECCS, however, either ADS trip system <u>alone</u> can actuate ADS. Therefore the same level of availability can be achieved by requiring that the redundant trip system in the other division be OPERABLE.

Footnotes (d) and (e) have been provided to take advantage of inherent conservatisms due to redundant logics which accomplish the same objective. Footnote (e) allows that only one of the available RHR "pumps running" permissives will fulfill the OPERABILITY requirements of Trip Function 4d, since either one (A or C in Div. I; B or D in Div. II) will complete that logic segment. Similarly, footnote (d) allows that either Trip Function 4d or 4e must be satisfied, since the logic is in parallel and either will support ADS trip system availability. Footnote (d) also requires the pump permissives being used to meet the new minimum requirement to be associated with OPERABLE pumps; this ensures that ADS availability is not compromised.

ACTION 37 has been provided to replace ACTIONS 30 and 31 as they apply to ADS trip functions. Both of the former ACTIONS resulted in declaring the associated ECCS inoperable. This results in an overly restrictive shutdown ACTION when a perfectly functioning ADS trip system still exists. In order to alleviate this problem, ACTION 37 was developed to parallel the existing ADS valve inoperability requirements of 3.5.1.d:

"3.5.1.d. For the ADS:

1. With one of the above required ADS valves inoperable, provided the HPCI system, the CSS and LPCI system are OPERABLE, restore the inoperable ADS valve to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to $\leq$100 psig within the next 24 hours."

2. With two or more of the above required ADS valves inoperable, be in at least HOT SHUTDOWN within 12 hours and reduce reactor steam dome pressure to $\leq$100 psig within the next 24 hours."

Part a of ACTION 37 parallels 3.5.1.d.1 above. In each case, a single failure has occurred which results in decreased reliability but is within the bounds presented in the accident analysis. See FSAR Table 6.3-2, attached. One of the LOCA analysis input parameters is that 5 of the 6 ADS valves are assumed to operate. Since all 6 ADS valves will actuate on a signal from either trip system, losing one channel is bounded by this assumption.

Part b of ACTION 37 was written to parallel 3.5.1.d.2 above. In each case, more valves than have been assumed to fail in the analysis have been affected. Therefore, shutdown is required, as well as getting reactor pressure below the pressure for which ADS is required to be OPERABLE.

Based on the above, ACTION 37 is much less rigorous than the current Technical Specification requirements. However, when assessed based on the ADS requirement in the ECCS analysis in FSAR Section 6.3, the instrumentation ACTIONS were shown to be overly conservative, and the existing ADS system (valve) requirements were used as a model to develop requirements within those previously set by the NRC for the ADS instrumentation.

- page 3/4 3-32: The setpoints provided are consistent with the NRC approved analysis supporting the required ADS logic modifications. They are consistent with the Susquehanna SES Unit 2 Technical Specifications.

- page 3/4 3-33: The response time listings are listed (although they present no new requirements) for the sake of providing consistency and complete information.

- page 3/4 3-35: The surveillance frequencies were chosen consistent with the existing ADS timer and the manual initiation function for the new timer and inhibit switch, respectively.

NO SIGNIFICANT HAZARDS CONSIDERATIONS

The proposed changes do not:

(1) involve a significant increase in the probability or consequences of an accident previously evaluated,

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated, or

(3) involve a significant reduction in a margin of safety.

The basis for this determination is provided below (the examples referenced are examples of amendments not likely to involve significant hazards considerations).

- page 3/4 3-28: Editorial changes were made to this page affecting the application of footnote (a). For the reasons provided earlier, these changes are examples as provided in 48FR14870, paragraph (i).

- page 3/4 3-29: As discussed, the addition of instrumentation consistent with the resolution of NUREG-0737 Item II.K.3.18 is required by the Unit 1 and Unit 2 Licenses. This is an example as provided in 48FR14870, paragraph (vii).

  The changes to the Minimum Operable Channels per Trip System requirements, although they reduce the margin of safety currently provided in the Technical Specifications, clearly maintain the level of safety required to meet the existing safety analysis. Therefore, these changes are examples as provided in 48FR14870, paragraph (vi).

- page 3/4 3-32: These setpoints support required modifications. Therefore these changes are examples as provided in 48FR14870, paragraph (vi).

- page 3/4 3-33: As discussed earlier, these changes are for consistency and clarity. They are therefore examples as provided in 48FR14870, paragraph (i).

- page 3/4 3-35: These surveillance requirements support required modifications. Therefore these changes are examples as provided in 48FR14870, paragraph (vi).

IMPLEMENTATION SCHEDULE:

- Unit 1: To support the referenced license condition, please condition your approval to become effective prior to startup following the first refueling outage.

- Unit 2: For all proposed changes except those applicable to the manual inhibit switch, we request that the change approvals be conditioned to become effective 30 days after approval to allow procedural updates to be developed and approved. For the manual inhibit switch changes, we request that maximum flexibility be provided within the September 1, 1985 timeframe referenced in the license condition. This is because we plan to do the work at the first forced shutdown of sufficient duration after receipt of NRC approval, but no later than September 1, 1985. Therefore we request that your approval be conditioned to become effective upon completion of the modifications and associated performance testing, but no later than September 1, 1985.

Any questions on this proposal should be directed to Mr. R. Sgarro, (215) 770-7855. Pursuant to 10CFR170.22, the appropriate fee is enclosed.

Very truly yours,

N. W. Curtis
Vice President-Engineering & Construction-Nuclear

Attachment

cc: M. J. Campagnone - USNRC
R. H. Jacobs - USNRC

T. M. Gerusky, Director
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