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 BUTLER, W. R.      Project Directorate I-2

SUBJECT: <sup>SEE REPTS</sup> Forwards application for amend to Licenses NPF-14 & NPF-22, changing Tech Specs 3.0.4, 4.0.3 & 4.0.4 per Generic Ltr 87-09. Fee paid.

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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 AMENDMENTS 103 AND 53  
TO LICENSE NOS. NPF-14 AND NPF-22  
PLA-2926 FILE A17-2

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 based on the recommendations which the NRC provided via Generic Letter 87-09.

BACKGROUND

This proposed change to the Technical Specifications addresses specifications 3.0.4, 4.0.3 and 4.0.4; the problems associated with each of these are described individually below.

- o 3.0.4 - This specification prohibits changes in operational conditions while relying on the provisions of action statements. Exemptions to 3.0.4 are provided in individual specifications based on historical precedent. Although this is adequate in most cases, instances have occurred (ref. Amendment 29 to License No. NPF-22, dated October 6, 1986, and Amendment 71 to License No. NPF-14, dated September 28, 1987) and will continue to occur where an emergency change is required to permit operational condition changes in response to unforeseen circumstances which unnecessarily restrict plant operations.
- o 4.0.3 - This specification establishes the failure to perform a surveillance requirement within its specified time interval (as defined by the 4.0.2 "grace period") as noncompliance with the associated LCO. This is overly conservative since a missed surveillance does not provide any real evidence that the function to be tested is actually inoperable. This conservatism is a problem in certain instances when the LCO restoration time is short, thereby forcing testing (of a component that is probably operable) to be completed on an urgent basis in order to avoid a shutdown.

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- o 4.0.4 - This specification prohibits entry into an operational condition until all required surveillances have been performed. This could cause an interpretation problem when operational condition changes are required in order to comply with action statements.

Based on Generic Letter 87-09, the proposed solutions to the above problems are as follows:

- o 3.0.4 - Revise to define when its provisions apply (i.e., when the affected action statements permit continued operation for an unlimited period of time) instead of defining when they do not.
- o 4.0.3 - Revise to include a 24 hour delay in implementing action requirements due to a missed surveillance when the action requirements provide a restoration time that is less than 24 hours.
- o 4.0.4 - Provide the following clarifying statement:

"This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements."

JUSTIFICATION:

- o 3.0.4 - Many of the Technical Specifications allow remedial actions (i.e., other than restoring the inoperable component) when an LCO cannot be met, so that shutdown can be avoided. In those cases where the remedial action is not a significant degradation from the level of protection required by the LCO (examples include fire watches in lieu of detection or suppression equipment, and effluent grab sampling when an effluent monitor is inoperable), or when the remedial action affords greater protection than the LCO (such as isolation of a containment penetration when one of its isolation valves is inoperable), an unlimited period of time is provided during which the LCO can be met by the alternate means. Most of these specifications currently contain exemptions to the provisions of 3.0.4 so that operational condition changes are not unnecessarily impeded when operation can safely continue. The proposed change will apply this philosophy universally rather than on a case-by-case basis. This will not have a significant affect on safe operation, but from a practical perspective will minimize the potential for restrictions on power production during operation and on flexibility during outages. Good examples of this include the two emergency Technical Specification amendments mentioned under "Background".

Based on the discussion above, the proposed change to 3.0.4 presents no significant degradation in the safe operation of SSES.

- o 4.0.3 - The essence of this change is to provide a reasonable amount of time (24 hours) to perform a missed surveillance in recognition of the fact that in most cases a surveillance verifies the operability, rather than the inoperability of a component. This allowance would only be provided when the existing action statement time limits are less than 24 hours.

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1. The first part of the document discusses the general situation of the country and the role of the government. It mentions the need for a strong central authority and the importance of maintaining order and stability. The text is somewhat repetitive and lacks clear structure.

2. The second part of the document deals with the economic situation and the need for reform. It mentions the importance of agriculture and industry and the need for a more efficient system. The text is very general and does not provide any specific details or data.

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4. The fourth part of the document discusses the political situation and the need for reform. It mentions the importance of a strong central authority and the need for a more democratic system. The text is very general and does not provide any specific details or data.

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The basis for the 24 hour limit, according to the NRC, is that it "would balance the risks associated with an allowance for completing the surveillance within this period against the risks associated with the potential for a plant upset and challenge to safety systems". They further conclude that 24 hours is appropriate based on consideration of plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in the completion of the surveillance. PP&L concurs with this qualitative assessment. A more optimum time might be obtained through rigorous analysis, but engineering judgment indicates that such an effort would not only be very difficult due to the wide range of applications, but inappropriate given the short duration and the expected minimal use of the provision. At SSES only 23 of over a conservatively estimated 200,000 surveillances (combined total for Units 1 and 2) have been missed since licensed operation began in 1982.

Based on the above discussion, it is apparent that the proposed change to 4.0.3 does not represent an adverse impact on safety for the following reasons:

1. Based on experience, the proposed change will minimize the potential for shutdowns due to the inability to perform a missed surveillance on components that are, in all probability, operable. Therefore, unwarranted plant transients will be avoided and safety is improved.
  2. The provision does not provide additional time when the situation does not warrant it. When greater than 24 hours exists, or when the component is known to be inoperable, the normal action applies.
  3. The potential for misinterpretation of the new wording was reviewed, and it is believed that the improved Bases section for the proposed change (as well as the guidance in the Generic Letter, if needed) will adequately mitigate any unforeseen for problems in this area.
- o 4.0.4 - Although this has not caused problems at Susquehanna, the clarification recommended by the NRC Generic Letter has merit. Currently, a conflict can exist between the operational condition changes required by action statements, and 4.0.4, which precludes such changes if surveillances required to support the new condition are not completed prior to entry. The new statement added to 4.0.4 removes this conflict; this change is an editorial improvement to the Tech Specs that has no significant affect on safe operation. The previous change to 4.0.3, however, will have a positive safety impact on this particular problem. When surveillances are "missed" due to operational condition changes which are forced by action statements, an additional 24 hours will be available as discussed earlier. This additional time will again minimize unwarranted further changes in operational condition due to the inability to perform testing.

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CONCLUSION:

The recommendations presented in Generic Letter 87-09 are definite improvements to the Technical Specifications. They result from an ongoing cooperative effort between NRC and industry (in which PP&L participates) to provide generic improvements. As discussed above, each change is either inconsequential or has some positive affect on safety, although some are certainly more direct than others. For this reason, approval of these changes is recommended.

NO SIGNIFICANT HAZARDS DETERMINATION:

The following three questions are addressed below for each of the proposed Technical Specification changes:

- I. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?
- II. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?
- III. Does the proposed change involve a significant reduction in a margin of safety?

o 3.0.4:

- I. No. In each case where relief from Operational Condition change restrictions will now be available, it was either available before or it is being proposed in recognition that taking the prescribed remedial action upon entry into a given specified condition as opposed to having already been in that condition is not adverse to safety. This is a valid statement because such relief is only allowed when the prescribed action has no time limits, which signifies that unlimited operation under the action has already been determined by the NRC to be an acceptably safe alternative means of meeting the LCO requirements. Based on the above, the proposed change to Specification 3.0.4 (and the editorial changes to the attached marked-up specifications where the provision of 3.0.4 were previously stated to be not applicable) do not adversely affect the probability or consequences of any previously evaluated accident.
- II. No. As stated in I above, the unlimited nature of the actions associated with this proposal ensure a level of safety commensurate with that which is normally required. Therefore these conditions will not require analysis of potentially new or different accidents.
- III. No. Again, the premise upon which these changes are proposed is that the difference in safety margin between taking a time-independent action upon entry into a given operational condition and taking the same action while in that condition is insignificant.

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o 4.0.3:

- I. No. Although it is conceivable under this proposal that additional time could be provided for restoration of inoperable components, this occurs only when the component affected by the missed surveillance is found to be inoperable once the test is actually performed. Therefore, the effect of this change is to only allow entry into action statements when the component is known to be inoperable or when adequate ( 24 hours) test performance time is provided. This has an insignificant effect on previous analyses because the potential for an untested component to be inoperable is low and because the action (which must be 24 hours) is entered as soon as the test is failed. Furthermore, very few missed surveillances are anticipated and of these few cases, a smaller number will involve inoperable components. Based on the above, this change has no significant effect on the probability or consequences of previously analyzed accidents.
- II. No. The revised provisions of 4.0.3. modify existing constraints on previously analyzed conditions, as was analyzed in I above. They do not create the possibility for new or different accident scenarios.
- III. No. The margin of safety is affected by this change, but the affect is insignificant at worst and subjectively improved at best for the following reasons:
  1. Based on experience, the proposed change will minimize the potential for shutdowns due to the inability to perform a missed surveillance on components that are, in all probability, operable. Therefore, unwarranted plant transients will be avoided and safety is improved.
  2. The provision does not provide additional time when the situation does not warrant it. When greater than 24 hours exists, or when the component is known to be operable, the normal action applies.
  3. The potential for misinterpretation of the new wording was reviewed, and it is believed that the improved Bases section for the proposed change (as well as the guidance in the Generic Letter, if needed) will mitigate any potential for problems in this area.

o 4.0.4:

- I. No. As stated in Generic Letter 87-09, "It is not the intent of Specification 4.0.4 to prevent passage through or to operational modes to comply with action requirements and it should not apply when mode changes are imposed by "Action Requirements". Therefore, this change can be interpreted as editorial clarification. Regardless, ensuring that performance of surveillance tests will not



be required during shutdowns to comply with actions will reduce the probability of previously analyzed transients and accidents by minimizing activities which could challenge safety systems during a shutdown evolution.

II. No. This change will lessen the probability of known events as described in I above. It has no features which could create the possibility of new or different scenarios.

III. No. As inferred in I above, the margin of safety is improved due to this change by minimizing challenges to safety systems when they are not warranted. Therefore, this clarification cannot adversely affect safe operation.

Any questions on the above proposal should be directed to Mr. R. Sgarro at (215) 770-7916. Pursuant to 10CFR170, the appropriate fee is enclosed.

Very truly yours,



H. W. Keiser  
Vice President-Nuclear Operations

Attachments

cc: NRC Document Control Desk (original)  
NRC Region I  
Mr. L. R. Plisco, NRC Resident Inspector  
Mr. M. C. Thadani, NRC Project Manager  
Mr. T. M. Gerusky, Pa. DER

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