

PHILADELPHIA ELECTRIC COMPANY

10CFR50.90

NUCLEAR GROUP HEADQUARTERS

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STATION SUPPORT DEPARTMENT

May 6, 1993

Docket Nos. 50-352
50-353

License Nos. NPF-39
NPF-85

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Subject: Limerick Generating Station, Units 1 and 2
Technical Specifications Change Request No. 92-11-0

Dear Sir:

Philadelphia Electric Company hereby submits Technical Specifications Change Request No. 92-11-0, in accordance with 10CFR50.90, requesting an amendment to the Technical Specifications (TS) (Appendix A) of Operating License Nos. NPF-39 and NPF-85. Information supporting this Change Request is contained in Attachment 1 to this letter. Attachment 2 provides a list of references used to justify this Change Request, and Attachment 3 provides the proposed TS replacement pages.

This submittal requests changes to the TS to extend surveillance test intervals and allowed outage times for the actuation instrumentation as analyzed in Reference 1 and approved by the NRC in Reference 2. The requested changes are consistent with those analyzed and approved in these references. The changes proposed herein complete the implementation of reduced testing of those items analyzed by General Electric and reviewed and approved by the NRC.

This letter also submits Enclosure 1, "Limerick Generating Station, Unit 1 Instrument Drift Data for Selected BWR Actuation Instrumentation."

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If you have any questions regarding this matter, please contact us.

Very truly yours,

G. A. Hunger, Jr.
G. A. Hunger, Director
Licensing Section

Attachments

Enclosure

cc: T. T. Martin, Administrator, Region I, USNRC
N. S. Perry, USNRC Senior Resident Inspector, LGS
W. P. Dornsife, Commonwealth of Pennsylvania

COMMONWEALTH OF PENNSYLVANIA

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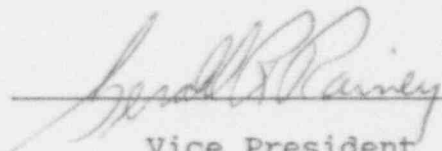
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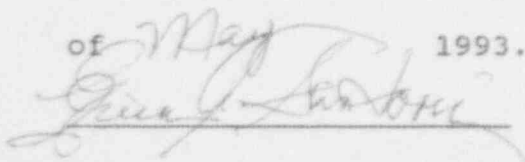
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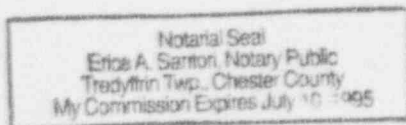
G. R. Rainey, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company, the Applicant herein; that he has read the foregoing Application for Amendment of Facility Operating License Nos. NPF-39 and NPF-85 (Technical Specifications Change Request No. 92-11-0) to reduce the testing frequency of selected BWR actuation instrumentation, and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.


Vice President

Subscribed and sworn to
before me this 6th day
of May 1993.





Attachment 1

LIMERICK GENERATING STATION

UNITS 1 and 2

Docket Nos. 50-352

50-353

License Nos. NPF-39

NPF-85

TECHNICAL SPECIFICATIONS CHANGE REQUEST

"Reduced Testing of Selected Actuation Instrumentation"

Supporting Information for Changes - 5 pages

Philadelphia Electric Company (PECo), Licensee under Facility Operating Licenses NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively, requests that the Technical Specifications (TS) contained in Appendix A of the Operating Licenses be amended as proposed herein to extend surveillance test intervals (STIs) and allowed outage times (AOTs) for selected actuation instrumentation. The proposed changes will minimize unnecessary testing and remove excessively restrictive AOTs that could potentially degrade overall plant safety and availability.

We request the changes proposed herein, if approved, be effective 15 days after issuance of the Amendments.

This Change Request provides a discussion and description of the proposed TS changes, a safety assessment of the proposed TS changes, information supporting a finding of No Significant Hazards Consideration, and information supporting an Environmental Assessment.

Discussion and Description of Proposed Changes

Licensing Topical Report (LTR), "BWR Owners' Group Response to NRC Generic Letter 83-28, Item 4.5.3," (Reference 4) provided justification for the acceptability of current Reactor Protection System (RPS) instrumentation surveillance test intervals (STIs). In addition, Reference 4 established a basis for extending STIs and AOTs for RPS instrumentation based on reliability analyses which estimate RPS instrumentation failure frequency. The analyses were further developed in Reference 1 for extending TS STIs and AOTs for selected Boiling Water Reactor (BWR) Actuation Instrumentation, and the results were subsequently approved as detailed in an NRC Safety Evaluation Report (SER) (Reference 2). This SER describes the acceptability of both the analyses and the proposed TS changes provided to the NRC. In addition, Reference 2 provided criteria for plant specific implementation of the generically approved TS changes. Our conformance with these criteria is discussed in the Safety Assessment for this Change Request.

This Change Request proposes TS changes to selected BWR instrumentation that are specified in the TS mark-ups of Reference 2. All proposed changes are consistent with those approved by the NRC and documented in Reference 2. Therefore these changes are not further discussed.

Additionally, several editorial changes are proposed. Two correct omissions from our Change Request submitted to the NRC by letter dated April 26, 1990 as TS Change Request No. 89-16. In this Change Request No. 89-16 we provided justification for extending STIs from monthly to quarterly for various instrumentation including the scram discharge volume level

instrumentation and the suppression pool level instrumentation. Amendments 53 and 17 were issued to the Unit 1 and Unit 2 TS, respectively as a result of our Change Request, and included extension of STIs and AOTs for these instruments. However, in Change Request No. 89-16, we failed to include the necessary mark-up of TS Sections 4.1.3.1.4 and 4.6.2.1. Therefore, we are proposing to correct these omissions to eliminate the inconsistency between the 31 day STI currently required by TS Sections 4.1.3.1.4 and 4.6.2.1 and those which were approved in Amendments 53 and 17, currently shown in TS Tables 4.3.1.1-1 and 4.3.3.1-1, respectively. These latter pages are attached for your convenience in Attachment 3. The last editorial change involves reformatting TS 4.6.2.1(c) which currently contains requirements for both suppression chamber water level indicators and temperature indicators. We propose to split this item into two separate items since changes are proposed only to the suppression chamber water level indicator SR.

Safety Assessment

The effect on safety of the proposed extensions to the STIs and AOTs of the selected BWR actuation instrumentation has been addressed in Reference 1. Furthermore, the NRC has detailed their acceptance of the analyses and the conclusions of Reference 1 in an SER (Reference 2). The SER concludes that implementation of the TS changes proposed in Reference 1 would provide an overall enhancement to plant safety and that the proposed changes are acceptable subject to the licensee documenting (1) plant specific applicability, and (2) that instrument drift is bounded by the assumptions of the generic analyses. These acceptance conditions are addressed below.

1. A plant-specific review of the applicability of the Reference 1 LTR to LGS has been conducted. For the selected BWR actuation instrumentation, the review compared the LGS configuration with those in the Reference 1 analyses. This comparison concluded that the configurations are consistent with those in the Reference 1 analyses and thus the analyses are applicable to LGS, Units 1 and 2.
2. In 1988, the NRC issued additional guidance regarding instrument drift (Reference 3). This letter states that "licensees need only confirm that the setpoint drift which could be expected under the extended STIs has been studied and either (1) has been shown to remain within the existing allowance in the RPS (for BWRs) ... instrument setpoint calculation or (2) that the allowance and setpoint have been adjusted to account for the additional expected drift." Present setpoint calculations for LGS are based on an eighteen (18) month calibration interval. Therefore drift occurring during

a three month STI falls within the existing drift allowance. To further verify this, instrument drift data was examined over three consecutive monthly test intervals. Enclosure 1, "Limerick Generating Station, Unit 1, Instrument Drift Data for Selected Boiling Water Reactor Actuation Instrumentation," provides the as-found drift data on a 15% sample of affected LGS Unit 1 instrumentation. This data provides actual verification that the drift occurring over three consecutive test intervals (i.e., one calendar quarter) is within acceptable limits. Note that the basis for this proposed change is not affected by our pending request to increase the STIs for certain instruments from a nominal 18 month frequency to a nominal 24 month frequency, submitted to the NRC by letter dated October 15, 1992 as TS Change Request 92-03-0.

The editorial changes to TS Sections 4.1.3.1.4 and 4.6.2.1 which reformat and correct the omissions previously described do not affect safety. As discussed above we have conformed to the guidance provided in Reference 2 in the two areas to be addressed by licensees to ensure the acceptability of proposed TS changes.

Reference 2 provided TS changes based on review of the LTR (Reference 1). We have proposed TS changes consistent with those previously approved and specifically designated in Reference 2.

In summary, the NRC criteria for demonstrating the applicability and acceptability of all proposed changes has been shown to be met, as detailed above. We therefore conclude that the changes proposed will minimize unnecessary testing and relax excessively restrictive AOTs, and will provide an overall enhancement to plant safety.

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed changes to the LGS TS, which extend STIs and AOTs for selected BWR actuation instrumentation, do not involve a Significant Hazards Consideration. In support of this determination, an evaluation of each of the three standards set forth in 10CFR50.92 is provided below.

- 1) The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed TS changes increase the STIs and AOTs for selected BWR actuation instrumentation. In addition, several editorial corrections are proposed. There are no changes in any of the affected systems themselves. Since

there are no such changes, there can be no change in the probability of occurrence of an accident or the consequences of an accident or the consequences of malfunction of equipment. Regarding the probability of malfunction of equipment, Reference 1 showed that actuation instrumentation system unavailability was increased slightly. However, this increase in unavailability is less than the established acceptance criterion. The NRC, in its review of Reference 1, concurred with this conclusion. The changes proposed are consistent with the NRC issued SER (Reference 2). Therefore the proposed changes do not involve an increase in the probability or consequences of an accident previously evaluated.

2. The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed TS changes do not create the possibility for an accident or malfunction of a different type than any previously evaluated. The proposed changes increase the STIs and AOTs for selected BWR actuation instrumentation and make several editorial corrections. There are no changes to any systems. Since there are no such changes, there is no possibility for an accident or malfunction of a different type than any evaluated previously.

3. The proposed changes do not involve a significant reduction in a margin of safety.

The proposed TS changes do not reduce the margin of safety as defined in the basis for any TS. The proposed TS changes do not change any setpoints of the selected BWR actuation instrumentation or their level of redundancy. Setpoints are based upon the drift occurring during the 18 month calibration interval. The proposed changes extend STIs and AOTs, and are bounded by the analyses in Reference 1. The Reference 1 analyses reviewed and approved by the NRC, examined the effects of extending STIs and AOTs and found that the proposed changes do not involve a reduction in a margin of safety. The remaining proposed changes are editorial. Since they are editorial in nature, the changes will not reduce the margin of safety.

Information Supporting an Environment Assessment

An environmental assessment is not required for the changes proposed by this Change Request because the requested changes conform to the criteria for "actions eligible for categorical exclusion," as specified in 10CFR51.22(c)(9). The requested changes will have no impact on the environment. The proposed

changes do not involve a significant hazards consideration as discussed in the preceding section. The proposed changes do not involve a significant change in the types or significant increase in the amounts of any effluent that may be released offsite. In addition, the proposed changes do not involve a significant increase in individual or cumulative occupation radiation exposure.

Conclusion

The Plant Operations Review Committee and the Nuclear Review Board have reviewed these proposed changes to the TS and determined that they do not involve an Unreviewed Safety Question and will not endanger the health and safety of the public.

REFERENCES

1. W. P. Sullivan, et al., "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," GENE-770-06-1, February 1991."
2. Safety Evaluation by the office of Nuclear Reactor Regulation, "Review of the BWR Owners Group Report GENE-770-06-1 on Justification for Extending Surveillance Test Intervals and Allowed Out-of-Service Times for Selected BWR Actuation Instrumentation," July 21, 1992.
3. C. E. Rossi, NRC, to R. F. Janacek, BWROG, "Staff Guidance for Licensee Determination that the Drift Characteristics for Instrumentation Used in RPS Channels are Bounded by NEDC-30851P Assumptions when the Functional Test Interval is Extended from Monthly to Quarterly," April 27, 1988.
4. S. Wisweswaran, et al., "BWR Owners' Group Response to NRC Generic Letter 83-28, Item 4.5.3," General Electric Company, NEDC-30844, January 1985.