

PHILADELPHIA ELECTRIC COMPANY

NUCLEAR GROUP HEADQUARTERS

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WAYNE, PA 19087-5691

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STATION SUPPORT DEPARTMENT

August 25, 1993

Docket Nos. 50-352
50-353License Nos. NPF-39
NPF-85U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555Subject: Limerick Generating Station, Units 1 and 2
Technical Specifications Change Request

Gentlemen:

Philadelphia Electric Company (PECo) is submitting Technical Specifications (TS) Change Request No. 92-13-0, in accordance with 10 CFR 50.90, requesting an amendment to the TS (Appendix A) of Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively. This proposed TS change will modify the current TS Surveillance Requirement (SR) 4.7.1.3 to require that all spray pond spray network piping above the frost line be drained within one (1) hour after being used only when the ambient air temperature is below 40°F. Information supporting this TS Change Request is contained in Attachment 1 to this letter, and the proposed replacement pages for the LGS, Units 1 and 2, TS are contained in Attachment 2.

We request that, if approved, the amendments to the LGS, Units 1 and 2, TS be effective immediately.

If you have any questions, please do not hesitate to contact us.

Very truly yours,

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

Attachments

cc: T. T. Martin, Administrator, Region I, USNRC (w/ attachments)
N. S. Perry, USNRC Senior Resident Inspector, LGS (w/ attachments)
W. P. Dornsife, Director, PA Bureau of Radiological Protection
(w/ attachments)

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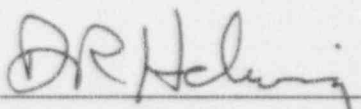
ADD 1

COMMONWEALTH OF PENNSYLVANIA :

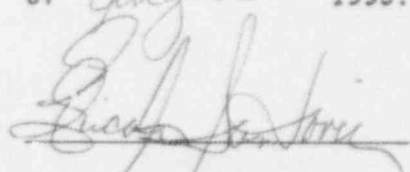
COUNTY OF CHESTER :

D. R. Helwig, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company; that he has read the foregoing Technical Specifications (TS) Change Request No. 92-13-0, for Limerick Generating Station, Units 1 and 2, concerning the proposed TS change to modify the current TS Surveillance Requirement (SR) 4.7.1.3 to require that all spray pond spray network piping above the frost line be drained within one (1) hour after being used only when the ambient air temperature is below 40°F, 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 ^{9th} day
of August 1993.


Notary Public

Notary Seal
Erica A. Santon, Notary Public
Tredyffrin Twp., Chester County
My Commission Expires July 10, 1995

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

No. 92-13-0

"Modify Technical Specification Surveillance Requirement 4.7.1.3
to Require that All Spray Pond Spray Network Piping Above
the Frost Line be Drained Within One (1) Hour After
Being Used When the Ambient Air Temperature is Below 40°F"

Supporting Information for Changes - 4 pages

Philadelphia Electric Company (PECo), Licensee under Facility Operating License Nos. 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 to the Operating Licenses be amended as proposed herein, to modify TS Surveillance Requirement (SR) 4.7.1.3 to require that all spray pond spray network piping above the frost line be drained within one (1) hour after being used only when the ambient air temperature is below 40°F. The proposed change to the TS are indicated by a vertical bar in the margin of TS page 3/4 7-5. The TS pages showing the proposed changes are contained in Attachment 2.

We request that, if approved, the TS change proposed herein be effective immediately upon issuance of the amendments.

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

Discussion and Description of the Proposed Changes

Currently, Technical Specifications (TS) Surveillance Requirement (SR) 4.7.1.3c requires that all spray pond piping above the frost line be drained within one (1) hour after use regardless of the ambient air temperature. The proposed TS change would modify this TS SR to require that this piping be drained within one (1) after use only after the ambient air temperature is below 40°F for freeze protection. The proposed TS change will not impact the ability of the spray pond to provide sufficient cooling water for the Emergency Service Water (ESW) and Residual Heat Removal Service Water (RHRSW) systems, nor will it effect the ability of the ESW and RHRSW systems to perform their design functions of rejecting design heat loads by providing cooling water to selected equipment during accident conditions. The spray network piping will be drained to prevent freezing, thereby ensuring the availability of the spray networks during cold weather conditions.

Safety Assessment

The spray pond (i.e., ultimate heat sink) serves both units at Limerick Generating Station (LGS) and functions to provide the safety-related source of cooling water for the Emergency Service Water (ESW) and Residual Heat Removal Service Water (RHRSW) systems during accident conditions. The spray pond is designed to provide sufficient cooling water for the ESW and RHRSW systems to reject the design heat loads that would be experienced during design basis accident conditions at either unit, and to allow for the concurrent safe shutdown and cooldown of the other unit, and to maintain both units in a safe shutdown condition. To facilitate this design function, four (4) spray piping networks are provided, i.e., two (2) redundant spray networks for each ESW and RHRSW

system combined return loop. The spray networks and network supply piping are completely above water, and are designed with a corrosion allowance of 250 mils. To ensure that this corrosion allowance is not exceeded over the life and 40 year life of the plants, the spray networks and network supply piping is sloped to allow for complete drainage of the piping thereby, minimizing corrosion and providing protection against freezing.

Currently, Technical Specifications (TS) Surveillance Requirement (SR) 4.7.1.3c requires that all spray pond piping above the frost line be drained within one (1) hour after use regardless of the ambient air temperature. The proposed TS change would modify this TS SR to require that this piping be drained within one (1) hour after use only after the ambient air temperature is below 40°F for freeze protection. This proposed TS change is consistent with the evaluation provided in Section 9.2.5, "Ultimate Heat Sink," of the NRC's Safety Evaluation Report (SER), i.e., NUREG-0991, "Safety Evaluation Report Related to the Operation of Limerick Generating Station, Units 1 and 2," dated August 1983. Specifically, the NRC stated in its SER that "...a limited condition for operation be incorporated into the Technical Specifications to require that the spray pond piping be drained at an ambient air temperature of 40°F, and, within one (1) hour after the operation of the spray networks with the air temperature below 40°F, all piping above the frost line is to be drained."

Additionally, in an effort to minimize corrosion and to ensure that the 250 mil corrosion allowance is not exceeded, plant procedures will continue to require that the spray networks be drained within 24 hours after use. In the event that draining the spray networks 24 hours after use as directed by current plant procedures is discontinued in the future, a new method for periodically verifying that the corrosion allowance of 250 mils has not been exceeded will be established.

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed change to the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TS) which modify TS Surveillance Requirement (SR) 4.7.1.3c to require that all spray pond piping above the frost line be drained within one (1) hour after being used only when the ambient air temperature is below 40°F does not involve a Significant Hazards Consideration. In support of this determination, an evaluation of each of the three (3) standards set forth in 10 CFR 50.92 is provided below.

1. The proposed Technical Specifications (TS) change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change to the TS Surveillance Requirement (SR) does not require any modifications to the plant or equipment, and does not impact any design or functional requirements of the spray pond, Emergency Service Water (ESW), or Residual Heat Removal Service Water (RHRSW) systems. No new failure modes are created by the proposed TS change. The operation of the spray pond as a source of

cooling water for the ESW and RHRSW systems, and as the ultimate heat sink is not affected. The ESW and RHRSW systems will continue to function as designed to mitigate the consequences of an accident by providing cooling water to selected plant equipment. The spray pond spray networks for the ESW and RHRSW systems will continue to operate as designed. These spray networks will continue to be drained soon enough to preclude the effects of freezing and will be available during cold weather conditions. Plant procedures will continue to require draining of the spray networks after use to minimize corrosion. Therefore, the proposed TS change does not involve an increase in the probability or consequences of an accident previously evaluated.

2. The proposed TS change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change to the TS SR does not require physical changes to the plant or equipment, and does not impact any design or functional requirements of the spray pond, ESW, or RHRSW systems. The proposed TS change only effects systems that are designed to mitigate the consequences of an accident and therefore, the proposed TS change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

The proposed change to the TS SR does not involve a change to the design or functional requirements of the spray pond, ESW, and RHRSW systems. These systems will continue to function as designed to mitigate the consequences of an accident. The spray pond spray networks will continue to be drained to prevent freezing and to ensure that the corrosion allowance of 250 mils is not exceeded over the licensed 40 year life of the plants. The current TS SR requires that the spray network piping be drained one (1) after use regardless of air temperature. The impact of this proposed change on system availability to drain the spray networks one (1) after use only when the ambient air temperature is below 40°F is negligible, since water freezes at 32°F and the intent of TS SR 4.7.1.3c is to prevent the spray networks and network supply piping from freezing, thereby ensuring the availability of the spray networks during cold weather conditions as discussed in Section 9.2.5 of NUREG-0991, "Safety Evaluation Report Related to the Operation of Limerick Generating Station, Units 1 and 2," dated August 1983. Plant procedures currently require that the spray network piping to be drained 24 hours after use to minimize corrosion. Therefore, the proposed TS change does not involve a reduction in a margin of safety.

Information Supporting an Environmental Assessment

An Environmental Assessment is not required for the change proposed by this Change Request because the requested change to the LGS, Units 1 and 2, TS conform to the criteria for "actions eligible for categorical exclusion," as specified in 10 CFR 51.22(c)(9). The requested change will have no impact on the environment. The proposed change does not involve a Significant Hazards Consideration as discussed in the preceding section. The proposed change does not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite. In addition, the proposed change does not involve a significant increase in individual or cumulative occupational radiation exposure.

Conclusion

The Plant Operations Review Committee and the Nuclear Review Board have reviewed this proposed change to the LGS, Units 1 and 2, TS and have concluded that they do not involve an unreviewed safety question, and will not endanger the health and safety of the public.