

PHILADELPHIA ELECTRIC COMPANY

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J. DOERING, JR.
PLANT MANAGER
LIMERICK GENERATING STATION

October 2, 1992

Docket No. 50-353
License No. NPF-85

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

SUBJECT: Limerick Generating Station, Unit 2
Follow-up Written Request for a Temporary
Waiver of Compliance by the
Office of Nuclear Reactor Regulation.

Gentlemen:

This letter provides the follow-up written request for a Nuclear Reactor Regulation (NRR) Waiver of Compliance. This request was discussed and approved by the NRC during a teleconference conducted on October 1, 1992 at 1830 hours, between Messrs. W. Butler, J. Shea, C. Hehl, E. Wenzinger, and C. Anderson of the NRC, and Messrs. J. Doering, L. Hopkins, G. Madsen, R. Krich, R. Dickinson, D. Neff, G. Stewart, and Mrs. K. Selby of the Philadelphia Electric Company (PECo). This request for a temporary waiver of compliance resulted from a situation in which we have submitted a timely proposed Technical Specifications (TS) change that would alleviate the current problems but the TS change has not yet been approved by the NRC. Processing this TS change on an emergency or exigent basis is not necessary since NRC approval is imminent. As requested by the NRC during the October 1, 1992 teleconference, this follow-up written request is being submitted to the NRC on Friday, October 2, 1992.

Discussion of the Requirements for Which The Waiver is Requested

This request involves a temporary change of an acceptance criteria (i.e., 10,000 gpm) specified in TS Surveillance Requirement (SR) 4.6.2.3.b to include flow through both the Residual Heat Removal (RHR) heat exchanger and the associated closed bypass valve in the flow path for the Suppression Pool Cooling (SPC) mode of the RHR system. On October 1, 1992, a minor increase in bypass flow around the Unit 2 'B' RHR heat exchanger was measured. As a result,

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SR 4.6.2.3.b could not be met as the SR is currently written. This condition resulted in the Unit 2 'B' loop of the SPC mode of the RHR system being declared inoperable and thereby requiring a plant shutdown upon expiration of the TS Section 3.6.2.3 ACTION "a" time limit. TS Section 3.6.2.3 ACTION "a" specifies that with one SPC loop inoperable, restore the inoperable loop to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. This waiver requests permission to satisfy SR 4.6.2.3.b by meeting the acceptance criterion in proposed SR 4.6.2.3.b submitted to the NRC by our letter dated August 11, 1992, and thereby restore the Unit 2 'B' loop of the SPC mode of the RHR system to operable status and thus prevent a plant shutdown. This waiver is requested until the TS change request for this clarification is approved by the NRC.

Discussion of Circumstance, and Need for Prompt Action

On September 28, 1992, at 1905 hours, the Unit 2 'B' subsystem of the RHR system was removed from service and declared inoperable for a planned outage. Corrective and preventive maintenance work on the subsystem and related support systems was performed on September 28, 1992 through October 1, 1992. This work did not affect the subsystem flow path but did include repacking of system valves and minor preventive maintenance on the Unit 2 'B' RHR pump motor. During the afternoon of October 1, 1992, at the completion of the maintenance work, Surveillance Test (ST) procedure ST-6-051-252-2, "B RHR Pump, Valve and Flow Test," was performed to meet the SR interval. At approximately 1500 hours on October 1, 1992, plant staff determined that an increase in flow through the closed Unit 2 'B' RHR heat exchanger bypass valve, HV-C-51-2F048B, resulted in less than 10,000 gpm flow through the heat exchanger. SR 4.6.2.3.b specifies, in part, that the SPC mode of the RHR system is demonstrated OPERABLE by verifying that each required RHR pump develops a flow of at least 10,000 gpm on recirculation flow through the RHR heat exchanger, the suppression pool and the full flow test line when tested pursuant to Specification 4.0.5.

The ST procedure was performed again, and at 1630 hours flow through the Unit 2 'B' RHR heat exchanger was measured to be 9800 gpm. During the teleconference, a preliminary flow reading of 9950 gpm was discussed which was the maximum instantaneous flow rate observed during the second test. The actual test flow rate of record was 9800 gpm and was the average value measured in the test configuration. The Unit 2 'B' loop of the SPC mode of the RHR system remained inoperable and a Unit 2 shutdown would be required starting at 1905 hours on October 1, 1992.

During performance of the ST procedure, the Unit 2 'B' RHR pump developed a differential pressure of 169.91 psid with a measured flow of 10,000 gpm. This data confirmed the Unit 2 '3' RHR pump performance requirements as specified in TS Section 4.0.5, and the

inservice Testing (IST) program. The flow through the Unit 2 'B' RHR heat exchanger bypass valve was increased approximately 300 gpm since performance of the previous ST procedure on June 25, 1992. This data showed a slight increase in the degradation of the valve.

The issue of the flow path specified in TS SR 4.6.2.3.b was the subject of discussion between PECO and the NRC in June 1992. As a result of the discussions we concluded that a TS change request was needed to revise TS SR 4.6.2.3.b to remove the current ambiguity in the wording and to clarify the fact that the intent of this SR is to confirm RHR pump performance in the SPC mode of operation. The TS change request was submitted for this issue on August 11, 1992. The TS change request revises the SR to include the RHR heat exchanger bypass valve in the flow path for the tested RHR pump. The TS change request provides an evaluation that supports the conclusion that TS SR 4.6.2.3.b is intended to confirm RHR pump performance while operating in the SPC mode and is not to confirm the heat transfer capability of the RHR heat exchanger. We understand that this TS change had completed NRC technical review satisfactorily and that issuance of the approved TS amendment is imminent.

This waiver is requested because the current acceptance criterion in TS SR 4.6.2.3.b does not account for the RHR heat exchanger bypass valve and that minor degradation of the bypass valve resulted in the inability to satisfy the current acceptance criterion in the SR 4.6.2.3.b. Accordingly the Unit 2 'B' loop of the SPC mode of the RHR system continued to be inoperable and a Unit 2 shutdown would be required. This unit shutdown would be unnecessary since the current plant conditions satisfy the proposed SR acceptance criterion. Additionally, the proposed acceptance criterion together with periodic heat transfer testing satisfies the applicable regulatory requirements and demonstrates RHR system operability.

This request for a NRR Waiver of Compliance could not be avoided because the minor degradation of the RHR heat exchanger bypass valve is monitored only during performance of the quarterly RHR system pump valve and flow ST procedure. In this particular situation, the subsystem had been out of service for part of the TS allowed outage time for preventive and corrective maintenance, before the ST procedure was performed.

Discussion of Compensatory Action

A review of current plant conditions was performed and the plant staff and the Plant Operations Review committee (PORC) verified that continued operation is bounded by the evaluation previously performed for the submitted TS change request. Therefore, no compensatory actions were needed.

Safety Significance and Potential Consequences

The safety significance of operation with this condition has been evaluated and is provided in the TS change request submitted to the NRC by a letter dated August 11, 1992. The evaluation concluded that the change to the SR acceptance criterion did not involve an unreviewed safety question since degradation of the heat transfer capability would be identified by periodic heat transfer testing committed to in our response to NRC Generic Letter 89-13, "Service Water Problems Affecting Safety-Related Equipment."

Discussion of the Duration of the Request

This waiver is requested to be effective until our TS change request of August 11, 1992 is approved by the NRC.

Basis for Conclusion that Requested Waiver Does Not Involve a Significant Hazards Consideration

We have concluded that continued plant operation during the period of the NRR Waiver of Compliance does not involve a significant hazards consideration since current RHR and RHR Service Water conditions are within the conditions evaluated in the unreviewed safety question evaluation performed for our TS change request and discussed in our letter dated August 11, 1992.

Basis for Conclusion that Requested Waiver Does Not Involve Irreversible Environmental Consequences

We have concluded that continued plant operation during the period of the NRR Waiver of compliance does not involve irreversible environmental consequences as evaluated in our TS change request submitted by letter dated August 11, 1992.

Confirmation that the Action has been Reviewed and Approved by the Plant Operations Review Committee (PORC)

At 1800 hours on October 1, 1992, the PORC reviewed the condition of Unit 2 and the proposed waiver of compliance. The PORC concluded that the current plant conditions are bounded by the previous unreviewed safety question evaluation performed for the

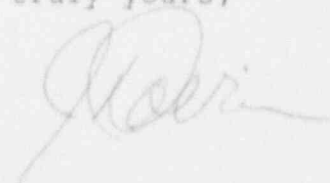
proposed change request to SR 4.6.2.3.b and submitted to the NRC by letter dated August 11, 1992. If, at any time during the period that the temporary waiver of compliance is in effect and the proposed TS SR acceptance criterion cannot be met, the applicable TS ACTION will be taken.

NRC Approval and Conditions

NRC approval of our verbal request for a waiver of compliance was granted at the conclusion of the October 1, 1992 teleconference at 1854 hours. The duration of the waiver was granted until approval of the requested TS change request to TS SR 4.6.2.3.b.

If you have any questions or require additional information, please contact us.

Very truly yours,



DBN/RMK:cah

cc: T. T. Martin, Administrator, Region I, USNRC
T. J. Kenny, USNRC Senior Resident Inspector, LGS

bcc: D. M. Smith - 52C-7
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