

# PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4500

V. S. BOYER  
SR. VICE PRESIDENT  
NUCLEAR POWER

Dockets: 50-352  
50-353

October 19, 1984

Mr. Harold Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Limerick Generating Station Units 1 & 2  
Request for Exemption from 10 CFR 50 Appendix A,  
GDC 2 & 4

Dear Mr. Denton:

Pursuant to 10 CFR 50.12, Philadelphia Electric Company hereby requests an exemption from the requirement of 10 CFR 50, Appendix A, General Design Criteria (GDC) 2 and 4 as they relate to the protection of the ultimate heat sink (UHS) from the effects of tornado missiles. This exemption is requested for power levels not exceeding 5 percent of full power.

Loss of the UHS (spray pond) due to to nado missiles for power levels not exceeding 5% power will not endanger life or property for the following reasons:

1. Even if the heat removal capability of the cooling towers and spray networks were compromised by tornado missile effects, use of the cooling tower basins and/ or UHS in a "cooling pond type" mode would allow substantial time for spray network repair. Under design meteorology, it would take approximately 5 days for the pond to reach its 95°F limit.

8410230306 841019  
PDR ADOCK 05000352  
A PDR

*B001*  
*11*

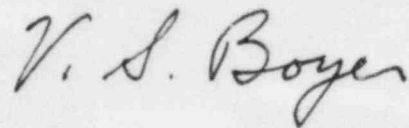
2. In the remote possibility that the heat removal capability of the spray pond networks and the cooling towers is compromised, and that repairs cannot be completed before the design temperature of the spray pond is reached, a once-through mode of cooling can be implemented. In this mode of operation, cool water from the cooling tower basins is supplied to the spray pond pumphouse wet pits, ESW and RHRSW will pump this water through the plant, the water is returned to the spray pond and is allowed to discharge over the blowdown weir and storm spillway. Sufficient makeup water can be supplied to the cooling tower basins to sustain continuous operation in this mode from the Schuylkill River or a number of other sources.
3. During the period of operation before exceeding 5% power, it is extremely unlikely that tornado or missile damage to the networks would occur. But in the event that this should occur, there is sufficient time to effect the repairs on any one of the four networks such that sufficient heat removal capability can be restored without the existence of specific procedures. Specific procedures for such repairs will be completed prior to exceeding 5% power.
4. As indicated in the above discussions, substantial time is available for corrective operator actions. If UHS capability should be lost for such a long period of time that conditions degraded considerably, the existing plant emergency procedures would direct the use of equipment which would achieve a safe stable state regardless of UHS capability.

The requested exemption does not impact the common defense and security. Only the potential impact on public health and safety is at issue.

The requested exemption is in the public interest in that any delay in commencement of low power testing and power ascension would cause a delay in the attainment of commercial operation (and subsequent increase in ratepayers' cost) and since, as shown above, the health and safety of the public will be adequately protected.

Based upon the foregoing, we have concluded that granting the requested exemption will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, Philadelphia Electric Company requests that the Commission issue an exemption to GDC 2 and 4 for power levels not exceeding 5 percent of full power. An affidavit in support of this request is attached hereto.

Sincerely,

A handwritten signature in cursive script that reads "V. S. Boyer". The letters are fluid and connected, with a prominent loop at the end of the word "Boyer".

V. S. Boyer

See attached Service List

cc: Judge Helen F. Hoyt  
Judge Jerry Harbour  
Judge Richard F. Cole  
Judge Christine N. Kohl  
Judge Gary J. Edles  
Judge Reginald L. Gotchy  
Troy B. Conner, Jr., Esq.  
Ann P. Hodgdon, Esq.  
Mr. Frank R. Romano  
Mr. Robert L. Anthony  
Ms. Phyllis Zitzer  
Charles W. Elliot, Esq.  
Zori G. Ferkin, Esq.  
Mr. Thomas Gerusky  
Director, Penna. Emergency Management Agency  
Angus R. Love, Esq.  
David Wersan, Esq.  
Robert J. Sugarman, Esq.  
Martha W. Bush, Esq.  
Spence W. Perry, Esq.  
Jay M. Gutierrez, Esq.  
Atomic Safety & Licensing Appeal Board  
Atomic Safety & Licensing Board Panel  
Docket & Service Section  
Mr. James Wiggins  
Mr. Timothy R. S. Campbell

STATE OF MARYLAND )  
MONTGOMERY COUNTY )

V. S. Boyer, being first duly sworn, deposes and says:  
That he is Senior Vice President of Philadelphia Electric  
Company, the applicant herein; that he has reviewed the  
foregoing request pursuant to 10 CFR 50.12 for certain  
specific exemptions to the requirements of Appendix A and  
knows the contents thereof; and that the matters and  
statements set forth therein are true and correct to the  
best of his knowledge , information and belief.

V. S. Boyer  
Senior Vice President

Subscribed and sworn to before me on the 19th  
day of October 1984.

D. Lynn Neal  
Notary Public

D. LYNN NEAL  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires July 1, 1986