NRCB No. 92-01 PHILADELPHIA ELECTRIC COMPANY 10CFR50.54(f) NUCLEAR GROUP HEADQUARTERS 955-65 CHESTERBROOK BLVD. WAYNE, PA 19087-5691 (215) 640-6000 September 28, 1932 NUCLEAR SERVICES DEPARTMENT Docket Nos. 50-2 7 50-2:8 50-312 50-353 License Nos. DPR-44 DPR-56 NPF-39 NPF-85 U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555 SUBJECT: Peach Bottom Atomic Power Station, Units 2 and 3 Limerick Generating Station, Units 1 and 2 Response to NRC Bulletin No. 92-01, Supplement 1, "Failure of Thermo-Lag 330 Fire Barrier System to Perform Its Specified Fire Endurance Function" Gentlemen: NRC Bulletin (NRCB) No. 92-01, "Failure of Thermo-Lag 330 Fire Barrier System to Maintain Cabling in Wide Cable Trays and Small Conduits Free from Fire Damage," was issued on June 24, 1992 to notify licensees of failures in fire endurance testing associated with the Thermo-Lag 330 fire barrier systems installed to protect safe shutdown capability. Because of failures experienced during recent fire endurance testing of Thermo-Lag 330 fire barrier systems conducted by Texas Utilities (TU) Electric, the NRC determined that the one (1) and three (3) hour pre-formed panels and conduit shapes installed on small conduit and wide cable trays (wider than 14 inches) do not provide the level of safety as required by NRC requirements. NRCB No. 92-01 requested licensees to take the immediate actions identified in the Bulletin, including a written response. Accordingly, Philadelphia Electric Company (PECo) responded to NRCB No. 92-01 by letter dated July 21, 1992. 210060090 530

Subsequently, on August 28, 1992, the NRC issued NRCB No. 92-01, Supplement 1, "Failure of Thermo-Lag 330 Fire Barrier System to Perform Its Specified Fire Endurance Function," based on failures during more recent Thermo-Lag fire endurance tests. Supplement 1 expands the scope of NRCB No. 92-01 to include one (1) and three (3) hour pre-formed panels and conduit shapes installed on conduits and cable trays of all sizes and configurations, and used to construct fire barrier walls, ceilings, and equipment enclosures. The NRC determined that these assemblies also do not provide the level of safety as required by NRC requirements. Accordingly, NRCB No. 92-01, Supplement 1, requested licensees to take the actions identified below. These actions are essentially the same as those specified in NRCB No. 92-01, but include the expanded scope.

- 1. For those plants that use either 1- or 3-hour preformed Thermo-Lag 330 panels and conduit shapes, identify the areas of the plant which have Thermo-Lag 330 fire barrier material installed and determine the plant areas which use this material for protection and separation of the safe shutdown capability.
- 2. In those plant areas in which Thermo-Lag fire barriers are used in raceways, walls, ceilings, equipment enclosures, or other areas to protect cable trays, conduits, or separate redundant safe shutdown functions, the licensee should implement, in accordance with plant procedures, the appropriate compensatory measures, such as fire watches, consistent with those that would be implemented by either the plant technical specifications or the operating license for an inoperable fire barrier. These compensatory measures should remain in place until the licensee can declare the fire barriers operable on the basis of acceptable tests which demonstrate successful 1- or 3-hour barrier performance.

Required Report
Each licensee who has installed Thermo-Lag 330 fire barriers must inform the NRC in writing within 30 days of receiving this Bulletin Supplement whether or not it has taken the above actions. Where fire barriers are declared inoperable, the licensee is required to describe the measures being taken to ensure or restore fire barrier operability. These measures should be consistent with actions taken in response to Bulletin No. 92-01.

PECo received NRCB No. 92-01, Supplement 1, on August 28, 1992. Our response is provided below.

## Response

PECo does have Thermo-Lag 330 fire barrier systems installed at Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, and Limerick Generating Station (LGS), Units 1 and 2. Those areas of PBAPS and LGS which have Thermo-Lag 330 fire barrier material installed on conduits, cable trays, walls, ceilings, or equipment enclosures to protect safe shutdown capability were identified, and the associated fire barriers were declared inoperable. In addition, the appropriate compensatory measures (i.e., fire watches) were established in accordance with PBAPS and LGS Technical Specifications (TS) in those areas, or NRC approval was obtained for the use of an equivalent method of complying with TS fire watch requirements.

With respect to LGS, no additional fire watches were required in response to NRCB No. 92-01, Supplement 1, since the fire areas affected as a result of Supplement 1 were previously fire watched in response to the original Bulletin. With respect to PBAPS, additional fire areas were affected, including the Pipe Tunnel area for Unit 3. The NRC, by letter dated September 2, 1992, confirmed their verbal approval given on August 28, 1992 of our request for a Temporary Waiver of Compliance (TWOC) from the TS required continuous fire watch for the Unit 3 Pipe Tunnel area until we could install a closed circuit television (CCTV) system. The use of the CCTV system to perform the TS required continuous fire watch for the Unit 3 Pipe Tunnel area was also verbally approved by the NRC on August 28, 1992 and confirmed in the September 2, 1992 letter.

The compensatory measures described above will remain in effect until the appropriate actions have been taken to restore fire barrier operability. Such actions are being developed through an industry program being coordinated by the Nuclear Management and Resources Council (NUMARC). This program will include establishment of a test database, development of guidance for applicability of tests, development of generic installation guidance, and consideration and coordination of additional testing as appropriate. We intend to apply the appropriate results of these efforts, when completed, to the Thermo-Lag installations within the scope of NRCB No. 92-01, Supplement 1.

Accordingly, we will provide the NRC with a supplemental response describing the actions taken to restore fire barrier operability once these actions are implemented. This supplemental response will be provided in lieu of the supplemental response as committed to in our July 24, 1992 response to NRCB No. 92-01.

Very truly yours,

G. J. Beck, Manager Licensing Section

Enclosure: Affirmation

cc: T. T. Martin, Administrator, Region I, USNRC

J. J. Lyash, USNRC Senior Resident Inspector, PBAPS T. J. Kenny, USNRC Senior Resident Inspector, LGS

COMMONWEALTH OF PENNSYLVANIA SS. COUNTY OF CHESTER D. R. Jelwig, being first duly sworn, deposes and says: That he is Vice President of Philadelphia Electric Company; that he has read the foregoing response to NRC Bulletin No. 92-01, Supplement 1, Failure of Thermo-Lag 330 Fire Barrier System to Perform Its Specified Fire Endurance Function," for Peach Bottom Atomic Power Station, Units 2 and 3, and Limerick Generating Station, Units 1 and 2, 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 20

> Notary Published Seal Erica A. Santori, Notary Public Tredythin Twp. Chester County My Commission Expires July 10, 1995