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September 18, 1984

Docket Nos. 50-277
50-278

Mr. Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Peach Bottom Atomic Power Station
NUREG-0612 Control of Heavy Loads
Unit 2 Dryer-Separator Sling

Dear Mr. Eisenhut:

The purpose of this letter is to confirm the action taken by Philadelphia Electric Company relative to the lifting of the Peach Bottom Unit 2 steam dryer assembly and steam separator shroud head assembly.

On May 4, 1984, as part of the Unit 2 refuel outage, while preparing to lift the Unit 2 steam dryer assembly, it was discovered that the Unit 2 dryer-separator sling (the special lifting device for this lift) did not properly set in place over the lugs of the steam dryer assembly. Immediately following this discovery, the Peach Bottom Atomic Power Station Plant Operational Review Committee met to consider use of the Unit 3 dryer-separator sling to perform the separate lifts of the steam dryer assembly and the steam separator shroud head assembly.

Philadelphia Electric Company, as part of its NUREG-0612 "Control of Heavy Loads at Nuclear Power Plants" modification effort, had upgraded the Unit 2 dryer-separator sling to comply with the single failure proof criteria of NUREG-0612, Section 5.1.6. The Unit 2 dryer-separator sling modifications consisted of the following:

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- 1) Increasing the load capacity of the dryer-separator sling by welding 1-1/4 inch thick carbon steel plate to the top and bottom of the entire length of the wide flange spreader beams.
- 2) Replacement of the existing socket pins, which connect the dryer-separator sling to both the steam dryer assembly and the steam separator shroud head assembly, with larger diameter socket pins.
- 3) Replacement of the existing 1-5/8 inch diameter wire rope assembly with a new assembly consisting of a zinc poured spelter socket with 3-1/2 inch diameter pin attaching to the hook box lug plate, 2-1/4 inch diameter wire rope and a wire rope thimble.
- 4) Modification of the hook box lug plate lifting eyes to accommodate the larger spelter socket pins.
- 5) Replacement of the existing turnbuckle with a larger capacity turnbuckle.
- 6) Modification of the lug plate lifting eyes of the wide flange spreader beams to accommodate the larger capacity turnbuckle.

Examination of the Unit 2 dryer-separator sling revealed slight misalignment of the wide flange (spreader) beams and a loss of tolerance in the steam dryer assembly and the steam separator shroud head assembly lug holes due to the larger size of the new socket pins. The combination of the misalignment of the spreader beams and larger socket pins prevented the dryer-separator sling from properly seating into the matching lifting lugs of the steam dryer assembly.

Therefore, it was determined that the wide flange spreader beams and the socket pins of the Unit 3 dryer-separator sling would be needed to perform the separate lifts of the Unit 2 steam dryer assembly and steam separator shroud head assembly.

The Plant Operational and Review Committee (PORC) noted that the use of the Unit 3 dryer-separator sling, which had not yet been modified to comply with the single failure proof criteria of NUREG-0612, would be performed under the following conditions:

- (1) Prior to lifting the Unit 2 steam dryer assembly, the wide flange spreader beams and socket pins would receive inspection in accordance with procedures which require magnetic particle examination of the welds of the Unit 3

dryer-separator sling wide flange spreader beams, liquid penetrant examination of the lifting eyes of the wide flange spreader beams and ultrasonic examination of the socket pins.

- (2) Visual verification of socket pin engagement of the dryer-separator sling to the steam dryer assembly and steam separator shroud head assembly.
- (3) Establishment of secondary containment integrity during the lifts.
- (4) Either one RHR pump or one core spray pump would be restored to automatic operation during the lifts.
- (5) The condensate system, all RHR pumps and core spray pumps would be manually available for injection of water into the vessel during the lifts.

In addition to establishing these conditions for these lifts, the PORC recognized that the Unit 3 wide flange spreader beams of the dryer-separator sling had performed 24 previous lifts.

The proposed use of the Unit 3 dryer-separator wide flange spreader beams and socket pins was discussed with the Resident Inspector who concurred that the use of the Unit 3 dryer-separator sling components would be satisfactory under the above compensatory measures.

In addition, Gerald A. Gears of your staff was notified of this action by phone from Philadelphia Electric Company Licensing Section Staff. This letter was prepared in accordance with Gerald A. Gears' request to confirm the equipment utilized to lift the Unit 2 steam dryer assembly and steam separator shroud head assembly and our intended future action.

On May 5, 1984, prior to the lifting of the Unit 2 steam dryer assembly, magnetic particle examinations were performed on the welds and liquid penetrant examinations were performed on the lifting eyes of the Unit 3 dryer-separator sling wide flange spreader beams and ultrasonic examinations were performed on the Unit 3 dryer-separator sling socket pins to verify their integrity.

Following these examinations, the Unit 3 dryer-separator sling wide flange spreader beams and socket pins were utilized with the unaffected components of the Unit 2 dryer-separator sling to lift the Unit 2 steam dryer assembly on May 5, 1984 and the Unit 2 steam separator shroud head assembly on May 8, 1984.

Philadelphia Electric Company will correct the modified Unit 2 dryer-separator sling wide flange spreader beams and socket pins to properly fit the steam dryer assembly and steam separator shroud head assembly. Prior to returning these components of the sling to service, the Unit 2 dryer-separator sling will be load tested in accordance with ANSI N14.6 1978 standards.

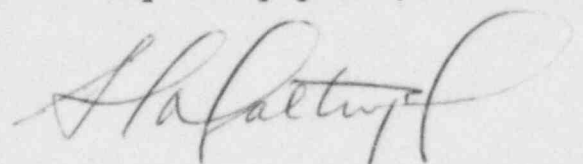
Philadelphia Electric Company anticipates that the Unit 2 dryer-separator sling components will be corrected prior to the reassembly of the Unit 2 steam dryer assembly and the steam separator shroud head assembly. However, in the event the Unit 2 dryer-separator sling is not returned to service prior to the restart of Unit 2, the two aforementioned Unit 3 dryer-separator sling components will be utilized to perform the Unit 2 lifts.

The Unit 3 dryer-separator sling components utilized to perform the Unit 2 lifts will be modified in accordance with Philadelphia Electric Company's NUREG-0612 commitment after the Unit 2 dryer-separator sling is returned to service. The modifications to be performed to the Unit 3 dryer-separator sling are the same as the modifications performed to the Unit 2 dryer-separator sling with two exceptions:

- 1) Modification will not be required to the hook box lug plate lifting eyes because the existing Unit 3 dryer-separator sling hook box lug plate lifting eyes are large enough to accommodate the larger diameter spelter socket pins.
- 2) Modification will not be required to the wide flange beam lug plate lifting eyes because the existing Unit 3 dryer-separator sling wide flange beam lug plate lifting eyes are large enough to accommodate the larger capacity turnbuckle.

If you have any additional questions or require additional information, please do not hesitate to contact us.

Very truly yours,



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cc: A. R. Blough, Site Inspector