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ELECTRIC PRODUCTION

November 19, 1984

Docket Nos. 50-277
50-278

Mr. John F. Stolz, Chief
Operating Reactors Branch No. 4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Location of the Technical Support Center for the Peach
Bottom Atomic Power Station

Dear Mr. Stolz:

This is in response to your letter of September 14, 1984, requesting additional information relating to the location of the Peach Bottom Atomic Power Station Technical Support Center (TSC) outside the plant protected area.

As indicated in our April 15, 1984 letter, the PBAPS TSC has sophisticated communications equipment which precludes the need for face-to-face communications with the control room. Dedicated telephone lines between the control room and TSC are provided for direct communications. Additionally, both the control room and TSC have access to the plant paging system and the plant internal telephone system to further enhance communications. To ensure control room data are available to preclude the need for face-to-face communications, closed circuit television has been installed. Additionally, cordless telephones are available in the control room to allow personnel to move about and collect special data requested by the TSC. To date, the combination of dedicated telephone lines, plant telephones, internal paging system, cordless telephones, and closed circuit television has shown no requirements for face-to-face communications during the three annual emergency response exercises observed by NRC inspection teams. Responses to your specific requests follow:

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1. NRC Request:

All protective measures that will be taken to limit the radiation dose received by personnel traveling between the TSC and the control room during severe accident sequences. Please provide also an estimate of the dose that would be received by an individual in a single transit during such accident conditions.

Response:

Protective measures taken to limit the radiation dose received by personnel traveling between the control room and TSC include:

- o anti-contamination clothing
- o respiratory equipment
- o radiological monitoring equipment
- o transportation vehicles
- o direct travel routes accounting for release direction and magnitude

The maximum potential dose received by an individual during a one-way trip between the two facilities is 80 millirem and would occur approximately 8 hours following the postulated LOCA. The potential dose would be 59 millirem two hours following the accident and 60 millirem twenty-four hours following the accident. These dose calculations are based on the use of the most direct route between the facilities, and the dose projections performed to meet NUREG-0737, Item II.B.2 (May 13, 1983 submittal, S. L. Daltroff, PECO to R. W. Starostecki, Region I, NRC). The dose projections were approved by the NRC as meeting Item II.B.2 in correspondence dated September 12, 1983 (J. F. Stolz, NRC to E. G. Bauer, Jr., PECO). The travel time using the most direct route has been clocked at approximately four minutes. The trip involves the use of a vehicle between the TSC building and the Units 2-3 power block, and in plant transit on foot without the use of elevators.

2. NRC Request:

All procedures to ensure that a motor vehicle will be available to transport personnel between the TSC and the control rooms of Units 2 and 3. The type of motor vehicle and a map illustrating the route or routes to be taken between the control room and the TSC should be provided.

Response:

Motor vehicles are available at the TSC since the primary access is by personnel arriving from Units 2 and 3 by vehicle or from other corporate locations by vehicle. There are no instances whereby a private or PECO vehicle would not be available to transport personnel. Security vehicles could also be used if necessary. No special procedures are contemplated because of the large supply of vehicles available as demonstrated in the 1982, 1983 and 1984 annual exercises. A site map showing the route that may be used is provided in Figures 1, 2 and 3.

3. NRC Request:

The reasons why the protected area cannot be extended to include the TSC within its boundaries.

Response:

The extension of the protected area has been considered but our review has indicated that it would not significantly enhance the control room to TSC transit for the following reasons.

- a. Delineation of the protected area at the TSC building would be difficult. The TSC is located above other areas, including the EOF, which would not be desirable to include in the protected area. Inclusion of the entire building would inhibit daily activities and during an emergency severely inhibit the ingress and egress of the Commonwealth of Pennsylvania, State of Maryland, NRC, FEMA, and local officials who report to the TSC and EOF.
- b. A site evacuation requires the protected area to be emptied of non-essential personnel and an accountability check to be made of personnel still within the area. The addition of another facility with both PECO and non-PECO personnel encumbers the accountability process.

- c. Extending the protected area boundary to include the TSC would involve the erection of additional fencing, closed circuit monitoring, and intrusion alarm systems. Additional patrol area would be added by this extension. This extension would increase capital material costs, maintenance costs, and personnel costs.
- d. Extending the Protected Area to include the TSC would entail adding the total Unit 1 facility to the Protected Area and would not be prudent from a security viewpoint. Good security practice dictates protecting the smallest area possible which contains all equipment requiring protection and which allows for efficient day to day operation of the Plant. In addition, extending the Protected Area at a location so far from the guard house could easily increase the security force response time.

4. NRC Request:

All special physical security arrangements that will be established to provide rapid ingress and egress from the protected area by TSC personnel during emergencies.

Response:

During an emergency, procedures exist which allow the Emergency Director to temporarily waive the search requirements and authorize ingress and egress of personnel through protected area gates. At that time, Security Team members will meet or escort the personnel to the gate and will dispense proper ID badges and dosimetry to the individuals.

5. NRC Request:

The specific data and information that will be available in the TSC from the control rooms, excluding the data provided by the closed circuit TV system monitoring the control room consoles, which demonstrates the limited need to send TSC personnel to the control room.

Response:

Excluding data from the closed circuit TV system, control room data are available to the TSC via dedicated telephones, plant telephone system, paging system, or radios. This data would include values for instrumentation, equipment status, and description of operations to be performed, being performed or completed. This precludes the need to send TSC personnel to the control room. Additionally, the Shift Technical Advisor is located in the control room to provide technical direction and assistance to the control room staff as well as to communicate with the Emergency Director in the TSC.

For the reasons stated above, face-to-face communications between TSC and control room personnel is not required. This approach has been demonstrated to be adequate, during the many drills and the three observed exercises. Please review the above information in regard to our request for an exception to the location requirement of the PBAPS TSC.

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

Very truly yours,

A handwritten signature in cursive script, appearing to read "A. R. Blough".

Attachment

A. R. Blough, Site Inspector, PB

DOCUMENT/ PAGE PULLED

ANO. 8411260389

NO. OF PAGES 3

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