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V. S. BOYER  
SR. VICE PRESIDENT  
NUCLEAR POWER

February 2, 1982

Docket Nos. 50-277  
50-278

Mr. R. C. Haynes  
Regional Administrator  
US Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

Dear Mr. Haynes:

This letter is in response to your letter to Philadelphia Electric Company, dated December 24, 1981 and provides a status report for those activities scheduled for completion by February 1, 1982.

ITEM 1

Develop and implement a method to insure that updated emergency procedures are available for use when and where needed by all persons who have emergency response roles.

This will be accomplished no later than February 1, 1982.

Response

Administrative Procedure A-2 identifies locations for distribution of emergency plan procedures and other pertinent plant procedures. This procedure has been revised to incorporate into the distribution list additional locations selected for E.P.

procedures. The Operations Support Center, the Alternate Chemistry Lab - Unit 1, Cold Chemistry Lab Units 2&3, dosimetry office and Maintenance Supervision Offices have been added. Currently a separate list is maintained for distribution of EP-C procedures. These distribution lists are available for inspection. This coverage should adequately accommodate the needs of personnel having emergency response rolls.

ITEM 2.a.

Expand on your letter to the NRC, dated April 3, 1981, to describe how the shift personnel discussed in the letter will fulfill the intent of the functions listed in Table B.1 of NUREG 0654 for 30 minute augmentation.

Response

The April 3, 1981 letter proposed a minimum Peach Bottom staff that did not involve 30 minute augmentation of the on-site staff. As an alternative, we proposed to provide on-shift personnel, in lieu of 30 minute call-ins for those who would be expected to perform necessary tasks within 60 minutes after an emergency had been declared, and established a 60 minute arrival period for the other personnel. This proposal was based on our assessment that 30 minute augmentation was not feasible due to the commuting time requirements of most plant employees. The area demographic and environmental characteristics that favors the siting of a nuclear facility has the effect of discouraging employees from situating in the immediate vicinity of the facility. The 30 minute response time would require personnel to live within 5 miles of the facility considering the time required to conduct the off-site personnel notification, plus the time for individuals to prepare themselves and travel to the plant. The imposition of such requirements would force limitations on the housing and behavioral patterns of individuals. This would have an adverse effect on morale, result in a loss of experienced personnel, and further aggravate the industry's problems in attracting additional qualified personnel.

Justification of the minimum staffing requirements proposed in our April 3, 1981 letter follows.

1. Table B-1 Requirement: 30 minute call-in for notification/communication function.

Response: It was proposed to meet this requirement by assigning an additional communicator to each shift since we consider the function to be essential during the early phase of an emergency. Therefore, our proposal is more conservative than Table B-1.

2. Table B-1 Requirement: Provide the following electrical maintenance/instrument and control support for performing maintenance.

On Shift: 1\*\*

30 min. capability: 2

60 min. Capability: 1

\*\*may be provided by shift personnel assigned other functions.

Response: The Table B-1 criteria requires human resources in this functional area of two man-hours during the first hour of the emergency. Additionally, the table does not require the on-shift support to be exclusively dedicated to this function. The PECO proposal specified two on shift personnel and two 60 minute call-ins. This provides an equivalent resource of two man-hours during the first hour. Further, all personnel are dedicated exclusively to this function. We consider our proposal to be at least as conservative as the Table B-1 criteria.

3. Table B-1 Requirement Technical support in the area of core/thermal hydraulics is required within 30 minutes.

Response: The proposal in the April 3, 1981 letter meets the intent of the Table B-1 criteria. We proposed additional personnel with this technical knowledge within one hour. Additionally, Peach Bottom has at least six individuals on shift with formal training in the subjects of heat transfer, hydraulics and thermodynamics (shift superintendent (1), shift supervisor (1), control room operators (3), STA (1)). The STA is a graduate engineer and will provide the technical engineering support needed during the first hour of the accident. Therefore, the Peach Bottom on-shift staff currently possesses the necessary expertise to handle all response activities during the first hour. Additional engineering support will be available within an hour.

4. Table B-1 Requirement: Provide the following staff to perform on-site and inplant surveys.

On-shift: 1  
30 min. capability: 2  
60 min. capability: 2

Response: The Table B-1 criteria requires human resources of two man-hours during the first hour to perform these tasks. The PECO proposal specified two on-shift H.P. technicians and three 60 minute call-ins. This provides an equivalent resource of two man-hours during the first hour and therefore meets the intent of the NRC criteria.

5. Table B-1 Requirement: Provide the following staff to perform off-site dose assessment, off-site surveys, out-of-plant surveys, access control, maintenance coverage, search and rescue, personnel monitoring, and dosimetry.

On-shift: 0  
30 min. capability: 5  
60 min. capability: 4

Response: The April 3, 1981 letter proposed a 60 minute call-in of nine health physics personnel to perform these tasks. We concluded that this response capability is sufficient for handling accident situations during non-outage, weekend and back-shift periods. The basis for this conclusion is provided below:

- a) The off-site dose assessment is performed by shift supervision during the initial phase of the accident using procedure EP-316 and data from installed instrumentation. The results of this assessment are forwarded to the various emergency response agencies for use in initiating the appropriate protective measures. The effectiveness of the assessment technique has been demonstrated during previous emergency drills. Computerized dose calculation capabilities will be operational in the near future that will enhance the speed and accuracy of this assessment. Consequently, senior health physics expertise and H.P. technicians are not required during the first hour for the initial dose assessment and off-site surveys.
- b) The extent to which H.P. technician support is needed for access control, maintenance coverage, search and rescue, first aid, personnel monitoring and dosimetry is a function of the number of personnel working on site and the type of activities in progress. The NRC criteria appears to provide for periods of significant maintenance activity. During a regular Company work day, and

during periods of significant maintenance activities, there are more than sufficient H.P. personnel available to perform these functions if an emergency should occur. The need to perform these functions would be limited if an emergency should occur at a time when there are fewer personnel working in the plant, such as weekends and backshifts with little or no maintenance in progress. In this situation, the two H.P. technicians identified in item 4 above would have sufficient time to perform these functions to the extent that they are needed during the first hour.

The NRC staffing criteria for H.P. technicians appears to provide for tasks that are better performed by the licensed operators using installed instrumentation, and for periods of significant maintenance activity. To implement the NRC criteria would involve having a senior health physicist and seven H.P. technicians on shift at all times. Our proposal to increase the on-shift Health Physics coverage, and to call in an additional eleven technicians within an hour would provide the necessary support required during an emergency. The effectiveness of the emergency organization can best be demonstrated during the upcoming drill.

ITEM 2b.

Describe your plan for assuring that a plant staff manager will be onsite in about 60 minutes to assume the role of EOF Director.

This will be accomplished no later than February 1, 1982, except that the drills will be completed by March 1, 1982.

Response

The EOF Director is identified in our plan and procedures as the Site Emergency Coordinator. It is recognized that the designated Site Emergency Coordinator and his alternate could not relocate to the EOF within the required 60 minute response time. Their response would be on the order of 1-1/2 to 2 hours. To overcome this problem, a list of eight alternates who could relocate to the EOF in 60 minutes has been established. Two from this list are on-call at all times. The individuals rotate to on-call status every four weeks. They have been assigned beepers. Their names have been added to the 60 minute call list. The first on-call individual contacted would report to the EOF and serve as the Interim Site Emergency Coordinator until relieved by the designated Site Emergency Coordinator.

ITEM 3a

Complete the development of and formalize the emergency preparedness training program for Peach Bottom personnel having emergency response roles and supporting personnel.

Formalization of the training program and the prompt training of selected individuals will be accomplished no later than February 1, 1982.

Response

Emergency response training following a revised and updated format started in early January, 1982. A formal description of the Training Program has been prepared and reviewed by appropriate personnel, and approved. This document is available for inspection. Modifications and revisions to the Training Program will continue based on criticisms received during implementation.

ITEM 3b

Promptly conduct training to assure that several individuals are fully trained in each functional area described in the Peach Bottom emergency response organization.

Formalization of the training program and the prompt training of selected individuals will be accomplished no later than February 1, 1982.

Response

The training which has been implemented since early January, 1982 consists of classroom presentations and group drills. The drills included demonstration in the field and tabletop problem solving. The schedule developed and presented throughout the month of January resulted in a majority of key emergency response leaders and emergency team members receiving training in their functions. Primary personnel or alternates have received this training. In some cases both primary and alternate attended. We believe that this effort more than satisfied your concern that a group of several individuals be promptly trained. A schedule for February has been developed to accommodate those few who could not attend the January sessions. Repeat drills and practice exercises over the next few months are planned to enhance the proficiency of emergency response personnel.

ITEM 4

Prepare a job description for the Site Emergency Planning Coordinator position which describes the responsibilities and authorities for coordinating all emergency response planning

and preparedness functions at the Peach Bottom Atomic Power Station.

This shall be accomplished no later than February 1, 1982.

Response

A job description for the Site Emergency Planning Coordinator position has been prepared and is available for inspection.

ITEM 6

Clarify the emergency response organizational concepts (especially Table 5.4 of the Emergency Plan) to show the EOF as the primary emergency coordination location (the TSC retains the primary responsibility for plant operations). All other organizations which provide support, including corporate organizations, will provide this support through the EOF Director.

This will be accomplished no later than February 1, 1982.

Response

The emergency organization chart has been changed to better reflect the intended relationship between the Emergency Director, the Site Emergency Coordinator and Support Groups. The intent of the Plan has always been to use the EOF as the major emergency response center and the Site Emergency Coordinator as the key decision maker. The Emergency Director, operating from the TSC will concentrate on plant activities. The remainder of the emergency organization provides support for these two main functions. The original chart identified an Emergency Control Officer operating from corporate headquarters. This title has been changed to Emergency Support Officer to better reflect the intended function. Likewise, the Headquarters Emergency Control Center has been changed to the Headquarters Emergency Support Center.

A copy of the revised chart is available for inspection. Other revisions to the plan are in process. The revised chart will be distributed when the next revision of the plan is published. This is expected in the next few months.

If there are any questions or if additional information is required, please don't hesitate to contact us.

Very truly yours,

*V. S. Boye*