U. S. NUCLEAR REGULATORY COMMISSION **REGION 1** 

Report Nos. 50-277/89-17 & 50-278/89-17

Docket Nos. 50-277 & 50-278

Priority -- Category C License Nos. DPR-44 & DPR-56

Licensee: Philadelphia Electric Company Post Office Box 7520 Philadelphia, Pennsylvania 19101

Facility Name: Peach Bottom Atomic Power Station, Units 2 & 3 Inspection At: Delta, Pennsylvania Inspection Conducted: June 13-15, 1989

May Kolon Z. Gordon, Regional Team Leader NRC Team Members: C. Amato, Region I C. Conklin, Region I T. Johnson, SRI L. Myers, RI R. Urban, RI D. Vito, Region I augus 1 ac Approved By: Lazarus, Chief, Emergency

Preparedness Section

6/27/89

Inspection Summary: Inspection on June 13-15, 1989 (Report Nos. 50-277/89-17 & 50-278/89-17)

Areas Inspected: Routine announced emergency preparedness inspection and observation of the licensee's partial participation annual emergency preparedness exercise conducted on June 14, 1989. The inspection was performed by a team of seven NRC Region I personnel.

Results: No violations were identified. The licensee's response actions for this exercise were adequate to provide protective measures for the health and safety of the public.

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# DETAILS

## 1.C Persons Contacted

The following licensee representatives and support personnel attended the exit meeting held on June 15, 1989.

- M. E. Brackman, Security Supervisor B. L. Clark, Superintendent, Administration J. B. Cotton, Superintendent, Operations J. F. Franz, Plant Manager
- R. R. Gallagher, Site Emergency Planning Coordinator
- N. E. Gazda, Supervisor, Nuclear Services Training
- J. P. Gerhart, Corporate EP Staff G. J. Hanson, Regulatory Engineer R. A. Kankus, Engineer, VP Office

- D. P. LeQuia, Superintendent, Plant Services M. J. Roache, Site Emergency Planning Coordinator, Limerick F. W. Weigand, Director Emergency Preparedness C. R. Wike, EP Technical Support

- J. R. Winzenried, Emergency Recovery Manager

During the conduct of the inspection, other licensee emergency response personnel were interviewed and observed.

#### 2.0 Emergency Exercise

The Peach Bottom partial-participation exercise was conducted on June 14, 1989, from 8:00 a.m. until 2:30 p.m. Personnel from the Commonwealth of Pennsylvania and the State of Maryland participated at the EOF. FEMA did not observe any activities.

#### 2.1 Pre-exercise Activities

The exercise objectives, submitted to the NRC Region I on March 9, 1989 were reviewed and determined to adequately test the licensee's Emergency Plan. On April 13, 1989 the licensee submitted the complete scenario package for NRC review and evaluation. Region I representatives had telephone conversations with the licensee's emergency preparedness staff to discuss the scope and content of the scenario. As a result, minor revisions were made to the scenario and supporting data provided by the licensee. It was determined that the revised scenario would provide for adequate testing of major portions of the Emergency Plan Implementing Procedures (EPIP) and also provide the opportunity for licensee personnel to demonstrate those areas previously identified by the NRC as in need of corrective action.

NRC observers attended a licensee briefing on June 13, 1989 and participated in the discussion of emergency response actions expected during the scenario. Suggested NRC changes to the scenario were made by the licensee and were also discussed during the briefing. The licensee stated that certain emergency response activities would be simulated and indicated in the scenario that controllers would intercede in exercise activities to prevent scenario deviations or disruption of normal plant operations.

The exercise scenario included the following events:

- -- Fire in High Pressure Service Water Pump Structure;
- -- Loss of main condenser vacuum;
- -- Increasing in-plant and drywell radiation levels;
- -- Anticipated Transient Without Scram (ATWS);
- -- Failure of Standby Liquid Control System;
- -- Offsite release of radioactivity to the environment;
- -- Declaration of Alert, Site Area Emergency, and General Emergency classifications; and
- -- Recommendations of protective measures to offsite authorities.

The above events caused the activation of the licensee's onsite and offsite emergency response facilities.

### 2.2 Activities Observed

During the conduct of the licensee's exercise, NRC team members made detailed observations of the activation and augmentation of the emergency organization, activation of emergency response facilities, and actions of emergency response personnel during the operation of the emergency response facilities. The following activities were observed:

- 1. Detection, classification, and assessment of the scenario events;
- Direction and coordination of the emergency response;
- Notification of licensee personnel and offsite agencies;
- Communications/information flow, and record keeping;
- Assessment and projection of radiological dose and consideration of protective action;
- 6. Provisions for in-plant radiation protection;

- 7. Performance of offsite and in-plant radiological surveys;
- 8. Maintenance of site security and access control;
- 9. Performance of technical support, repair and corrective actions;
- 10. Performance of firefighting activities;
- 11. Assembly and accountability of personnel; and
- 12. Provisions for communicating information to the public.

### 3.0 Exercise Observations

The NRC team noted that the licensee's activation and augmentation of the emergency organization, activation of the emergency response facilities, and use of the facilities were generally consistent with their emergency response plan and implementing procedures.

## 3.1 Exercise Strengths

The team also noted the following actions that provided strong positive indication of their ability to cope with abnormal plant conditions:

- Control room radio and telephone communications were clear and repeat back transmissions were used.
- Good assessment was displayed when operators attempted to open safety relief valves from the alternate and emergency shutdown panels.
- Overall performance by the Emergency Directors was effective as evidenced by strong command and control and use of safety perspective to combat events.
- -- Activation of each emergency response facility was timely.
- -- Deployment of offsite field teams was efficient and radio contact was maintained with all teams.
- Response by health physics personnel for inplant repair and corrective actions demonstrated thorough knowledge of implementing procedures.

# 3.2 Areas For Improvement

The NRC team identified the following areas which did not have a significant negative impact on overall performance during the exercise, but should be evaluated for corrective action. The licensee conducted an adequate self-critique of the exercise which also identified some of these areas.

- -- Following the Alert declaration, the shift Junior Technical Assistant (JTA) was not assigned to perform dose assessment functions in accordance with ERP-200 and ERP-315 until the EOF was close to activation. This may have resulted in some delay if a radiological release had occurred at that time.
- -- Operations personnel were not aggressive in pursuing the problem with the 'A' standby liquid control pump.
- -- Regular briefings were not held in the control room and OSC to advise personnel of current or degrading plant conditions.
- -- Confusion was observed on the part of security guards regarding accounting for personnel entering the affected vital area during the fire response.
- -- The most current information provided on the reactor parameter trending status board was not easily determined.
- -- During discussions of severe accident conditions between TSC and EOF staffs, unnecessary questions were raised by News Center personnel and briefly delayed this discussion.

### 4.0 Licensee Action on Previously Identified Items

Based upon discussions with licensee representatives, examination of procedures and records, and observations made by the NRC team during the exercise, the items identified during the previous emergency exercise were acceptably demonstrated and are closed:

- -- Inadequate utilization of staff members by shift manager.
- -- Communicators on the Emergency Notification System and Health Physics Network not able to discuss technical issues in detail.
- -- Not clear which individual in the EOF served in the Emergency Response Manager role throughout the exercise.

## 5.0 Exit Meeting and NRC Critique

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Following the licensee's self-critique, the NRC team met with the licensee representatives listed in Section 1 of this report. Team observations made during the exercise were summarized.

The licensee was informed that previously identified items were adequately addressed and that no violations were observed. Although there were areas identified for improvement, the NRC team determined that within the scope and limitations of the scenario, the licensee's performance demonstrated that they could implement their Emergency Plan and Emergency Plan Implementing Procedures in a manner that would provide adequate protective measures for the health and safety of the public.

Licensee management acknowledged the findings and indicated that they would evaluate and take appropriate action regarding the items identified for corrective action.

At no time during this inspection did the inspectors provide any written information to the licensee.