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November 14, 1984

Docket Nos. 50-277
50-278

Mr. John F. Stolz
Operating Reactors Branch #4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Request for the Procedures Generation Package
(Section 7, Supplement 1, to NUREG-0737)
for Peach Bottom Atomic Power Station

Dear Mr. Stolz:

This letter transmits additional information requested by your letter of September 21, 1984 (J. F. Stolz, NRC, to E. G. Bauer, Jr., PECO) to assist the staff in their review of the Emergency Operating Procedure (EOP) upgrade performed to meet the requirements of NUREG-0737, Item I.C.1. A previous response dated April 15, 1983 (S. L. Daltroff, PECO, to D. G. Eisenhut, NRC) provided a description of the procedures generation program utilized to implement Peach Bottom EOP's in March, 1983. The procedures conform with Revision 2 of the BWR Owners' Group Emergency Procedure Guidelines as approved by the NRC staff in correspondence dated February 8, 1983 (D. G. Eisenhut, NRC, to All BWR Licensees of Operating Reactors).

The Peach Bottom Procedure Generation Package, requested in your September 21, 1984 letter, consists of the following documents:

- 1) Administrative Procedure A-94, "Procedure for the Preparation and Control of Transient Response Implementation Plan (TRIP) Procedures". This administrative procedure incorporates both the Writer's Guide, and verification and validation program requirements for Emergency Operating Procedures (EOP).

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- 2) The Peach Bottom specific TRIP Bases that were prepared in support of the Peach bottom TRIP Procedures. This document addresses the Plant Specific Technical Guidelines requirement of NUREG-0737, Procedures Generation Package.
- 3) A description of the Transient Response Implementation Plan (TRIP) Procedure Training Program.

The first and third documents are enclosed with this submittal. The second document is currently being revised and will be submitted to the NRC on or before December 14, 1984. The Peach Bottom Procedure Generation Package (PGP) addresses all of the elements that NUREG-0737, Supplement 1, requires of a PGP; i.e., (1) plant specific technical guidelines, (2) writer's guide, (3) description of the validation/verification program for EOP's, and (4) description of a program for training operators in the use of upgraded EOP's. The Peach Bottom PGP will be used for all additions or revisions to the current EOP's, and contains information similar to that provided for the Limerick Generating Station which, as you stated in your September 21, 1984 letter, is generally acceptable to the staff.

Should you have any questions regarding this submittal, please do not hesitate to contact us.

Very truly yours,



Attachments

cc: A. R. Blough, Site Inspector

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PEACH BOTTOM ATOMIC POWER STATION

TRANSIENT RESPONSE IMPLEMENTATION PLAN (TRIP) TRAINING PROGRAM

1.0 GENERAL

The TRIP training program was developed to support implementation of the TRIPs. The TRIP writer interfaces with the Nuclear Training Section to ensure a supportive program.

2.0 PROGRAM DESCRIPTION

When developing the TRIP training program, the following major items were considered:

1. What type of operator training should be provided (initial, refresher).
2. What method of operator training should be followed.
3. What operator knowledge and skill level is desired.
4. What procedure tasks exist that require operator decision-making.
5. What training material is needed to support TRIP training requirements.
6. What current operator licensing requirements exist.
7. What method should be provided for operator feedback into the training program and TRIP development.
8. What will be the effect on current plant operation while training operators on TRIPs not yet in place at the plant.

This description outlines the approach to be used to train licensed operators on TRIPs and to ensure the operators are informed and knowledgeable of future changes to the TRIPs.

3.0 TRAINING PROGRAM GOALS

The initial, overall training goals for the TRIP training program are as follows:

1. To enable the operators to understand the structure of the TRIPs.
2. To enable the operators to understand the technical bases of the TRIPs.
3. To enable the operators to have a working knowledge of the technical content of the TRIPs.
4. To enable the operators to use the TRIPs under operational conditions.

Training program objectives to support these goals will be developed for each lesson plan.

4.0 INITIAL TRIP TRAINING METHODS

The TRIP training program was established to instruct operators in the TRIPs. It consisted of classroom instructions and simulator exercises. An outline of the TRIP training course is included as Figure I.

4.1 Classroom Instruction

Classroom instruction sessions of approximately twenty hours were conducted. Included in the information presented during this method was the following:

1. The logic behind the development of TRIPs.
2. The entrance and exit conditions for each TRIP procedure.
3. The TRIPs themselves, including supporting technical and human-factors information, and a step-by-step discussion of each procedure including the basis for each step.

Each classroom session addressed specific TRIPs and was followed by a simulator session where the TRIPs were practiced in appropriate scenarios.

4.2 Simulator Exercises

Training on the TRIPs was conducted for all licensed operators and Shift Technical Advisors (STA) using scenarios on the Limerick Training Center simulator for approximately twenty hours.

Training was conducted with all operators performing their normal control room functions. Additional training was conducted where the members of a crew alternate responsibilities. This additional training is important to promote understanding of the other operators' responsibilities in the overall conduct of the actions, and it should lead to enhanced communications within the control room.

5.0 REFRESHER TRAINING

Refresher training on the TRIPs is part of the normal licensed operator requalification program. For approximately 20% of the time devoted to requalification training, operators are presented with various sequences of events on the simulator whose symptoms require the operators to follow through the major flowpaths of the TRIPs. Realistic scenarios are developed to ensure that the critical aspects of the TRIPs are exercised.

Training on TRIPs is conducted in such a manner that each crew responds to the symptoms with each operator simulating the actions that he normally would be responsible for during an emergency incident. Licensed operators not assigned to a shift participate in the scenarios as part of a control room crew. The plant training staff participates in the development and execution of refresher training. The training staff is responsible for developing the scenarios, observing and evaluating the simulator demonstrations and critiquing the results. Any additional training needs are determined from the performance of the operators.

The scenarios are varied sufficiently to ensure the operators do not develop a set pattern of responses to incidents but are able to respond to the symptoms as they develop.

6.0 TRAINING ON REVISIONS

Training on minor procedure revisions will be conducted through a program of required readings (self-taught), preshift briefings, or lectures in the requalification program. Training on major revisions will be conducted by the use of classroom instruction and walk-throughs in the control room or on the simulator. If operational considerations do not allow control room walk-throughs, and the simulator is not available, training on major revisions will be conducted during classroom instruction.

7.0 INPUTS INTO TRAINING PROGRAM CHANGES

7.1 Supporting Training Material Changes

Changes to supporting training material will be factored into updated lesson plans and operator training packages. Some of the supporting material identified to date is as follows:

1. EPGs
2. Background information
3. Applicable design changes

7.2 Operator Feedback

Operator feedback resulting from TRIP verification, TRIP validation, and training critique forms will be used to keep the training program and TRIPs current and relevant.

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TRIP Procedure Training Program
for
Certified Operators

	<u>CLASSROOM</u>	<u>SIMULATOR</u>
Day I	<ol style="list-style-type: none"> 1. Intro to TRIP format and layout 2. T-99 3. T-100 	<ol style="list-style-type: none"> 1. IC-1 Startup 2. Transients consistent with T-100
Day II	<ol style="list-style-type: none"> 1. T-101 2. T-117 	<ol style="list-style-type: none"> 1. Transients and Accidents consistent with Classroom training.
Day III	<ol style="list-style-type: none"> 1. T-102 2. T-112 3. T-116 	<ol style="list-style-type: none"> 1. Transients and Accidents Consistent with Classroom training.
Day IV	<ol style="list-style-type: none"> 1. T-111 2. T-113 3. T-114 	<ol style="list-style-type: none"> 1. Transient and Accidents Consistent with Classroom training.
Day V	<ol style="list-style-type: none"> 1. T-115 	<ol style="list-style-type: none"> 1. Transient and Accidents Consistent with Classroom training.

Figure 1