



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

PHILADELPHIA ELECTRIC COMPANY
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DELMARVA POWER AND LIGHT COMPANY
ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-278

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 168
License No. DPR-56

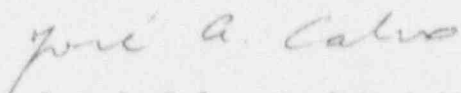
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company, et. al. (the licensee) dated November 21, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-56 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 168, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Jose A. Calvo, Assistant Director
for Region I Reactors
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 29, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 168

FACILITY OPERATING LICENSE NO. DPR-56

DOCKET NO. 50-278

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

REMOVE

INSERT

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LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS3.10 CORE ALTERATIONSApplicability

Applies to the fuel handling and core reactivity limitations.

Objective

To ensure that core reactivity is within the capability of the control rods and to prevent criticality during refueling.

SpecificationA. Refueling Interlocks

1. The reactor mode switch shall be locked in the "Refuel" position during core alterations and the refueling interlocks shall be operable except as specified in 3.10.A.2, 3.10.A.5 and 3.10.A.6 below.
2. Fuel shall not be loaded into the reactor core unless all control rods are fully inserted with the following exception*:
 - a. The reactor mode switch shall be locked in the "Refuel" position. The refueling interlock which prevents fuel from being loaded with a control rod withdrawn may be bypassed for any number of control rods, and those control rods withdrawn or removed from the core, if the four fuel assemblies surrounding each control rod or control rod mechanism to be withdrawn or removed from the core and/or reactor vessel are removed from the core cell. Additionally, all fueled cells face and diagonally adjacent to each cell with a control rod withdrawn or removed shall have their control rod fully inserted and their control rod's directional control valves electrically disabled. All other refueling interlocks shall be operable.

4.10 CORE ALTERATIONSApplicability

Applies to the periodic testing of those interlocks and instrumentation used during refueling and core alterations.

Objective

To verify the operability of instrumentation and interlocks used in refueling and core alterations.

SpecificationA. Refueling Interlocks

1. Prior to any core alterations within or over the reactor core, the reactor switch "Refuel" position interlocks shall be functionally tested. They shall be tested at weekly intervals thereafter until no longer required. They shall also be tested following any repair work associated with the interlocks.
2. Prior to performing control rod or control rod drive maintenance on control cells without removing fuel assemblies, it shall be demonstrated that the core can be made subcritical by a margin of 0.25 percent Δk at any time during the maintenance with the strongest operable control rod

* This exception is in effect during the period prior to completion of tensioning the reactor vessel head bolts for the Unit 3 Cycle 8 refueling outage.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

3.10.A Refueling Interlocks

3. The fuel grapple hoist load switch shall be set at ≤ 1000 lbs.
4. If the frame-mounted auxiliary hoist, the monorail-mounted auxiliary hoist, or the service platform hoist is to be used for handling fuel with the head off the reactor vessel, the load limit switch on the hoist to be used shall be set at ≤ 400 lbs.
5. A maximum of two nonadjacent control rods may be withdrawn from the core for the purpose of performing control rod and/or control rod drive maintenance, provided the following conditions are satisfied:
 - a. The reactor mode switch shall be locked in the "refuel" position. The refueling interlock which prevents more than one control rod from being withdrawn may be bypassed for one of the control rods on which maintenance is being performed. All other refueling interlocks shall be operable.
 - b. A sufficient number of control rods shall be operable so that the core can be made subcritical with the strongest operable control rod fully withdrawn and all other operable control rods fully inserted, or all

4.10.A.2 (cont'd)

fully withdrawn and all other operable rods fully inserted. Alternatively if the remaining control rods are fully inserted and have their directional control valves electrically disarmed, it is sufficient to demonstrate that the core is subcritical with a margin of at least $0.25\% \Delta k$ at any time during the maintenance. A control rod on which maintenance is being performed shall be considered inoperable.

4.10.A.3*

Prior to loading fuel in the core without all control rods fully inserted it shall be demonstrated analytically that the core is subcritical with a margin of at least $1.0\% \Delta k$ assuming a single fuel loading error into a cell with the control rod withdrawn.

- * This requirement is in effect during the period prior to completion of tensioning the reactor vessel head bolts for Unit 3 Cycle 8 refueling outage.

3.10 BASESA. Refueling Interlocks

The refueling interlocks are designed to back up procedural core reactivity controls during refueling operations. The interlocks prevent an inadvertent criticality during refueling operations when the reactivity potential of the core is being altered.

To minimize the possibility of loading fuel into a cell containing no control rod, it is required that all control rods are fully inserted when fuel is being loaded into the reactor core*. This requirement assures that during refueling the refueling interlocks, as designed, will prevent inadvertent criticality.

The refueling interlocks reinforce operational procedures that prohibit taking the reactor critical under certain situations encountered during the refueling operations by restricting the movement of control rods and the operation of refueling equipment.

The refueling interlocks include circuitry which senses the condition of the refueling equipment and the control rods. Depending on the sensed condition, interlocks are actuated which prevent the movement of the refueling equipment or withdrawal of control rods (rod block).

Circuitry is provided which senses the following conditions:

1. All rods inserted.
2. Refueling platform positioned near or over the core.
3. Refueling platform hoists are fuel-loaded (fuel grapple, frame mounted hoist, monorail mounted hoist).
4. Fuel grapple not full up.
5. Service platform hoist fuel-loaded.
6. One rod withdrawn.

When the mode switch is in the "Refuel" position, interlocks prevent the refueling platform from being moved over the core if a control rod is withdrawn and fuel is on a hoist. Likewise, if the refueling platform is over the core with fuel on a hoist, control rod motion is blocked by the interlocks. When the mode switch is in the refuel position, only one control rod can be withdrawn. The refueling interlocks, in combination with core nuclear design and refueling procedures, limit the probability of an inadvertent criticality. The nuclear characteristics of the core assure that the reactor

* This requirement is not in effect during the period prior to completion of tensioning the reactor vessel head bolts for Unit 3 Cycle 8 refueling outage.