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APRIL 3 1980

Docket Nos. 50-277
and 50-278

Mr. Edward G. Bauer, Jr.
Vice President and General Counsel
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

Dear Mr. Bauer:

The Commission has issued the enclosed Amendments Nos. 66 and 65 to Facility Operating Licenses Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station Units Nos. 2 and 3. The amendments revise the Technical Specifications in response to your request dated February 19, 1980.

These amendments revise the Technical Specifications to permit purging of the primary containment through the Reactor Building Ventilation Exhaust rather than the Standby Gas Treatment System when the reactor is in the cold shutdown condition and the primary system is depressurized.

Copies of the related Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,

Original signed by

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures:
1. Amendment No. 66 to DPR-44
2. Amendment No. 65 to DPR-56
3. Safety Evaluation
4. Notice

cc w/enclosures:
See page 2

OFFICE	ORB #3	ORB #3	AD:ORP	OELD	ORB #3	
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DATE	/80	/80	/80	/80	/80	

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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. 50-277

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 66
License No. DPR-44

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Philadelphia Electric Company, et al. (the licensee) dated February 19, 1980, 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-44 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 66, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 3, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 66

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

1. Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by amendment number and contains vertical lines indicating the area of change.

Remove	Insert
209	209

2. Add the following new page:

209a

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.8.C(Cont'd).	
9. a. Purging of the primary containment shall be through the Standby Gas Treatment System whenever primary containment integrity is required as specified in 3.7.A.2.	
b. Primary containment purging via the Reactor Building Ventilation Exhaust System may be performed whenever primary containment integrity is not required as specified in 3.7.A.2.	
c. The Standby Gas Treatment System shall be available, whenever the primary containment is being purged via the Reactor Building Ventilation Exhaust System.	
10.a. Except as specified in 3.8.C.10b below, two monitors downstream of the recombiners shall be operable during power operation.	
b. If the above specified required hydrogen monitors are not operable, an orderly reduction of power shall be initiated to bring the hydrogen production rate to less than 4% of the off-gas flow rate.	

LIMITING CONDITIONS FOR OPERATION

3.8.D Mechanical Vacuum Pump

1. The mechanical vacuum pump shall be capable of being isolated and secured on a signal of high radioactivity in the steam lines whenever the main steam isolation valves are open.

2. If the limits of 3.8.D.1 are not met the vacuum pump shall be isolated.

SURVEILLANCE REQUIREMENTS

4.8.D Mechanical Vacuum Pump

At least once during each operating cycle verify automatic securing and isolation of the mechanical vacuum pump.

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. 65
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 February 19, 1980, 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. 65, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 3, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 65

FACILITY OPERATING LICENSE NO. DPR-56

DOCKET NO. 50-278

1. Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by amendment number and contains vertical lines indicating the area of change.

Remove	Insert
209	209

2. Add the following new page:

209a

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.8.C(Cont'd).	
9. a. Purging of the primary containment shall be through the Standby Gas Treatment System whenever primary containment integrity is required as specified in 3.7.A.2.	
b. Primary containment purging via the Reactor Building Ventilation Exhaust System may be performed whenever primary containment integrity is not required as specified in 3.7.A.2.	
c. The Standby Gas Treatment System shall be available, whenever the primary containment is being purged via the Reactor Building Ventilation Exhaust System.	
10.a. Except as specified in 3.8.C.10b below, two monitors downstream of the recombiners shall be operable during power operation.	
b. If the above specified required hydrogen monitors are not operable, an orderly reduction of power shall be initiated to bring the hydrogen production rate to less than 4% of the off-gas flow rate.	

LIMITING CONDITIONS FOR OPERATION

3.8.D Mechanical Vacuum Pump

1. The mechanical vacuum pump shall be capable of being isolated and secured on a signal of high radioactivity in the steam lines whenever the main steam isolation valves are open.

2. If the limits of 3.8.D.1 are not met the vacuum pump shall be isolated.

SURVEILLANCE REQUIREMENTS

4.8.D Mechanical Vacuum Pump

At least once during each operating cycle verify automatic securing and isolation of the mechanical vacuum pump.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 66 AND 65 TO FACILITY LICENSE NOS. DPR-44 AND DPR-56

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

PEACH BOTTOM ATOMIC POWER STATION UNITS NOS. 2 AND 3

DOCKET NOS. 50-277 AND 50-278

1.0 Introduction

By letter dated February 19, 1980, Philadelphia Electric Company (the licensee) requested amendments to Operating License Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station, Unit Nos. 2 and 3. The proposed amendments would revise the Technical Specifications to permit purging of the primary containment through the Reactor Building Ventilation Exhaust System rather than the Standby Gas Treatment System when the reactor is in the cold shutdown condition and the primary system is depressurized.

2.0 Discussion

The proposed amendments would change the Peach Bottom Technical Specifications relative to the requirements for containment purging through the Standby Gas Treatment System (SGTS). The proposed revision would permit primary containment purging through the Reactor Building Ventilation Exhaust System whenever primary containment integrity is not required. Section 3.7.A.2 of the Technical Specifications states that primary containment integrity shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212°F and fuel is in the reactor vessel except while performing "open vessel" physics tests at power levels not to exceed 5 MW(t).

During the current refueling outage of Peach Bottom Unit 2, the licensee plans to complete part of the modifications required as part of the Mark I containment long term program. The licensee will also be cleaning and repainting the torus. The licensee proposes to accomplish similar modifications in the Unit 3 torus during the fourth refueling outage for that unit, scheduled for March 1981. Additional modifications to the torus will be required as part of the Mark I containment program during the fifth refueling outages for each unit.

3.0 Evaluation

Each of the units at Peach Bottom has its own primary containment and reactor building, with the latter serving as the secondary containment for each unit. The primary containment is an enclosure for the reactor vessel, the reactor coolant recirculation system and other branch connections of the reactor coolant system. The primary containment includes a drywell and a pressure-suppression chamber connected by vents, isolation valves, vacuum breakers, containment cooling systems and other service equipment. The primary containment is a seismic Class I structure and is designed to withstand the jet forces resulting from a postulated rupture of a reactor coolant system pipe.

The reactor building for each unit encloses the primary containment, the refueling and reactor servicing areas, new and spent fuel storage facilities and other reactor auxiliary systems. The reactor building, in conjunction with the Reactor Building Heating and Ventilating System and the Standby Gas Treatment System (SGTS), constitutes the secondary containment. The secondary containment serves as the containment during reactor refueling and maintenance operations, when the primary containment is open, and as an additional barrier when the primary containment is functional. The secondary containment (reactor building) is designed to seismic Class I criteria. Each reactor building is also designed to withstand internal pressures up to 7 inches of water. Each reactor building has personnel and equipment entrances. The entrances are provided with air-tight doors forming an airlock system to maintain the leak tightness of the buildings.

Each reactor building is provided with a Heating and Ventilating System. The systems are designed to: (1) provide leak tight secondary containment upon receipt of isolation signals, (2) provide ventilation in the engineered safeguards rooms using either normal or emergency power supplies and (3) circulate air from areas of lesser potential contamination to areas of potentially greater contamination prior to exhaust. Exhaust air is discharged to atmosphere through a stack on each reactor building roof. Radiation detection instrumentation continually monitors the exhaust air to determine the amount of radioactivity released from these sources. The reactor building ventilation system is shutdown and isolated, and the SGTS is started up by: (1) reactor vessel low water level, (2) drywell high pressure, (3) high radiation in the reactor building ventilation system exhaust stack or (4) manual actuation.

Peach Bottom Units 2 and 3 share a common Standby Gas Treatment System (SGTS), located in a shielded room in the radwaste building. The latter is located between the reactor buildings for Units 2 and 3. The SGTS consists of two parallel filter trains connected to three full-capacity exhaust fans. Each filter train is sized to serve both units simultaneously and each fan is capable of exhausting the rated flow (10,500 cfm) through one filter train to the plant stack. Each filter train consists of the

following components in series: (1) a moisture separator, (2) a heater (to lower the humidity of the air stream), (3) a water-resistant pre-filter, (4) a water resistant, high-efficiency (HEPA) filter, capable of removing 99.97% of 0.3 micron diameter particles, (5) a charcoal filter capable of removing 99.9% of elemental iodine and (6) a high-efficiency filter to remove charcoal dust or particulates which might have penetrated the other HEPA filter and charcoal bed.

Upon a reactor building isolation signal, the reactor building ventilation valves isolate the reactor building in 3 to 5 seconds. This rapid closure time prevents the escape of potentially contaminated air. At the same time, the SGTS is automatically started to maintain a negative pressure in the reactor building. Potentially contaminated air from the reactor then passes through the SGTS for treatment prior to elevated release from the plant stack. The SGTS will remain functional under earthquake conditions.

The licensee has proposed that primary containment purging may be performed via the Reactor Building Ventilation Exhaust System whenever primary containment integrity is not required as specified in Section 3.7.A.2 of the Technical Specification. The Technical Specification now in force requires that the containment shall not be purged except through the Standby Gas Treatment System (SGTS). The licensee's reason for the proposed Technical Specification change is to eliminate a potentially adverse impact on the availability of the SGTS for the operating Unit when certain planned maintenance and construction activities are in progress on the Unit that is shutdown. During future refueling outages Units 2 and 3 suppression chambers will be dewatered to allow torus structural improvements and coating repairs. The coating activities will generate significant quantities of volatiles that would rapidly reduce the absorption capabilities of the charcoal filters in the SGTS and possibly poison the charcoal. Also, welding fumes which will be generated during the torus modifications are detrimental to charcoal beds. It is important that the efficiency of the SGTS not be impaired in case it is needed for either the operating unit or the unit that is shutdown.

We have evaluated the licensee's plans for controlling airborne activity levels in the torus while the work is in progress and have concluded that the licensee has given adequate consideration to this. Initially, the torus will be dewatered and dry air circulated in the torus to reduce humidity and airborne activity levels. During this time, the torus will be vented through the SGTS. After airborne activity levels are below prescribed levels, the venting will be switched to the reactor building Heating and Ventilation System stack. Throughout the outage, as long as the other unit is operating, the SGTS must be operable and available. If, at any time, significant activity is detected in the Heating and Ventilation System exhaust, the reactor building will isolate automatically and exhaust will be processed through the SGTS.

To control airborne activity and to collect welding and painting fumes, the licensee during the current Unit 2 outage plans to use four 4000 cfm portable filtration systems in the torus. Each system will contain a HEPA filter and a charcoal filter in series. Each system will have 4 flexible duct intakes, so that the four systems could be collecting fumes from up to 16 points. These portable systems will be set up to take their intake in the work area and exhaust into the torus away from areas where personnel are working. The licensee also plans to add about 8500 cfm of fresh, dry air to the torus, so there will be an air change about every 5 to 6 minutes. Overall, the licensee plans to introduce less air than is being withdrawn, so there will be a negative pressure in the torus. Thus, any air flow through air locks or other sources will be into containment.

While work is going on in the torus, the licensee will also be refueling. During the upcoming Unit No. 2 refueling outage (March 21 - June 18, 1980), the licensee will be unloading the entire core. The present Technical Specifications (Section 3.7.B.1) require that the SGTS be operable at all times when secondary containment is required. One of the conditions for which secondary containment is required is when-even irradiated fuel is being moved in the reactor building (Section 3.7.C.1.d). Thus, the SGTS will be operable in the event of a possible fuel handling accident. This covers the periods of time when fuel is being unloaded or loaded in the reactor and the times when irradiated fuel is being added to or removed from the spent fuel pool in each reactor building. Once the fuel is stored in the spent fuel pool, the Technical Specifications prohibit loads in excess of 1000 pounds (excluding the rigging and transport vehicle) from travel over fuel assemblies in the spent fuel storage pool. (Section 3.10.D). Thus, once the fuel is moved and stored, there is little likelihood of a fuel handling accident. Nevertheless, if activity levels in the reactor building increased due to any cause, the reactor building would automatically isolate, the SGTS would automatically startup and all air exhausted from the reactor building would be through the SGTS.

On November 30, 1978, we issued Amendments Nos. 49 and 48 to Operating Licenses Nos. DPR-44 and DPR-56, which authorized Philadelphia Electric Company to increase the storage capacity of the two spent fuel pools (SFPs). As part of our safety evaluation, we reviewed the cooling capability of the SFPs. In addition to the normal makeup water capability from the condensate storage tank, there are four other sources of demineralized water and two sources of river water available for restoring water to the SFPs. We concluded that the SFP cooling systems satisfy the requirements in Regulatory Position C6 of Regulatory Guide 1.13 in that failures or maloperation will not cause the fuel to be uncovered. Thus, uncovering of the fuel in the SFP is not a creditable accident when the reactor building is vented through the Heating and

Ventilating System stack rather than the SGTS. In any case, if there were any increase in airborne activity due to this or any other cause, the reactor building (in which the SFP is located) would automatically isolate and venting would automatically switch to the SGTS.

4.0 Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

5.0 Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: April 3, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-277 NAD 50-278

PHILADELPHIA ELECTRIC COMPANY, ET AL.

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment Nos. 66 and 65 to Facility Operating License Nos. DPR-44 and DPR-56, issued to Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company, and Atlantic City Electric Company, which revised Technical Specifications for operation of the Peach Bottom Atomic Power Station, Units Nos. 2 and 3 (the facility) located in York County, Pennsylvania. The amendments are effective as of the date of issuance.

The amendments revise the Technical Specifications to permit purging of the primary containment through the Reactor Building Ventilation Exhaust rather than the Standby Gas Treatment System when the reactor is in the cold shutdown condition and the primary system is depressurized.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration

and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated February 19, 1980, (2) Amendment Nos. 66 and 65 to License Nos. DPR-44 and DPR-56, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Government Publications Section, State Library of Pennsylvania, Education Building, Commonwealth and Walnut Streets, Harrisburg, Pennsylvania. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland this 3rd day of April 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors