

BEFORE THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of :
PHILADELPHIA ELECTRIC COMPANY : Docket Nos. 50-277
: 50-278

SECOND AMENDMENT TO
AUGUST 6, 1981
APPLICATION FOR AMENDMENT
OF
FACILITY OPERATING LICENSES
DPR-44 & DPR-56

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On December 2, 1985, as a result of discussions with the NRC Staff, Philadelphia Electric Company ("Licensee") submitted an Amendment to its August 6, 1981 Application for Amendment of Facility Operating Licenses DPR-44 and DPR-56 regarding the drywell-suppression chamber vacuum breakers which revised the earlier Application to address several staff concerns. The Application, as amended, proposed a verification test in the event that position lights do not confirm a vacuum breaker to be in the fully closed position.

The December 2, 1985, Amendment proposed a periodic test for drywell to suppression bypass area leakage in the event the position indication on one or more vacuum breakers did not confirm a fully seated condition. The bypass area leakage test would then be performed once per month, provided the vacuum breaker was less than 3 degrees open, and provided that the suppression chamber differential pressure was not sufficient to cause a vacuum breaker opening; otherwise, the leakage test would be performed every 15 days.

This Second Amendment to the August 6, 1981 Application deletes the monthly testing provision as shown in Specification 3.7.A.4.b(2) of the December 2, 1985, Amendment while retaining the other two more conservative periodic testing provisions. The effect of removing the monthly testing provision will be to require periodic testing at a frequency of at least every 15 days in the event the position indication does not confirm all the vacuum breakers to be closed.

The deletion of the previously proposed monthly testing provision results from a series of discussions regarding the December 2, 1985, Amendment between the NRC staff reviewing the application and PECO's licensing and operating personnel during February and March, 1986. The NRC, following their review of the Application, as amended on December 2, 1985, requested that the plant condition required to support a monthly testing frequency be continuously monitored between monthly tests, and that the frequency be increased to 15 days if the plant conditions indicated a vacuum breaker position greater than 3 degrees, or a

torus-to-drywell differential pressure sufficient to open the vacuum breaker. A technical specification provision addressing this concern would (1) require instrumentation not currently installed, (2) would increase the potential for misinterpretation, and (3) would increase the administrative burden necessary to comply with the monthly testing provision. The NRC staff agreed that Licensee's proposal to delete the proposed monthly testing provision, while retaining the 15-day testing provision, would resolve its concerns. Additionally, the proposed 15 day testing frequency establishes consistency with the Standard Technical Specifications, NUREG-0123, Revision 3, page 3/4 6-23.

This Second Amendment also revises the provision to initiate testing within 8 hours of initial detection of a "not fully seated" position indication (3.7.A.4.b), as proposed in the December 2, 1985 Amendment, to require that testing shall be performed within 24 hours of initial detection of a not fully seated position indication. The language proposed in the December 2, 1985 Amendment only specified when the test had to be started but did not specify when the test must be completed. Consequently, the period that the facility can operate with a vacuum breaker position unverified was not limited by the proposed Technical Specifications. The change proposed herein would remedy this situation. Further, the change establishes consistency with specification 3.7.A.4.b(2) regarding testing following vacuum breaker exercising. Consequently, the

specifications on vacuum breaker testing is simplified, reducing the probability of personnel error.

Accordingly, Licensee hereby amends its Application of August 6, 1981 as previously amended on December 2, 1985, by deleting from the Application pages 170, 171 and 171a of the Technical Specifications and substituting therefore updated pages 170 and 171, which are attached hereto and incorporated herein by reference. The revisions to the current Technical Specifications are indicated by a vertical bar in the margin of enclosed pages 170 and 171. The material previously proposed for page 171a has been shifted to the revised page 171 enclosed with the Application and remains unchanged. The Application, as amended herein, would incorporate the following changes:

1. Delete the provision permitting continuous operation with one drywell-suppression chamber vacuum breaker in the position between "fully closed" and "3 degrees open".
2. Require a bypass area leakage test to be conducted within 24 hours of detection of a "not fully seated" position indication.
3. Require a bypass area leakage test to be conducted within 24 hours following the operability test of vacuum breakers if a "not fully seated" position indication exists.

4. Require periodic bypass area leakage tests every 15 days for the duration of a "not fully seated" position indication.

The bypass area leakage test is the same test as the one performed to verify Technical Specification 4.7.A.4.d that the drywell-to-suppression chamber bypass flow path is less than or equivalent to a one-inch diameter hole. This test is performed by establishing a pressure differential between the suppression chamber and the drywell (suppression chamber at a slight vacuum and the drywell at a slight positive pressure). The rate of rise in suppression chamber pressure is used to calculate the size of the bypass opening. A calculated bypass area of less than one-inch diameter confirms the fully seated condition of all drywell-to-suppression chamber vacuum breakers.

Further, Licensee requests several minor editorial and typographical corrections as indicated by a vertical bar in the margin of the attached pages.

Safety Analysis

Vacuum in the drywell is relieved by 12 valves between the drywell and the suppression chamber. These valves are self-actuating vacuum breakers similar to simple check valves and may be opened by auxiliary air actuators operable at local control stations external to containment for testing purposes. The vacuum breakers prevent excessive water level variation in the

vent discharge lines. They must not be inoperable in the open position since this would allow bypassing of the suppression pool in case of a reactor blowdown.

One of the proposed changes would eliminate the current Technical Specification provision that permits operation with a vacuum breaker in the position between "fully closed" and "3 degrees open": This change would reduce the potential for suppression pool bypassing under accident conditions. Consequently, the capability of the suppression pool to perform its design basis function is enhanced.

Other changes would require that a leakage test be performed to verify the closed status of the drywell-suppression chamber vacuum breakers within 24 hours following detection of an inoperable position indicator, or 24 hours following the exercising of vacuum breakers with an inoperable position indicator. The remaining change would require a repeat of the test every 15 days if the inoperability of a position indicator persists. These changes assure that the closed status of the vacuum breakers is monitored, and that the plant is operated without excessive drywell-suppression chamber bypass leakage.

Significant Hazards Consideration Determination

The proposed revisions impose more conservative Limiting Conditions for Operation and surveillance requirements on the drywell-suppression chamber vacuum breakers that reduce the potential for bypass leakage between the suppression chamber

and the drywell. The Commission has provided guidance for the application of the standards for determining whether a significant hazards consideration exists by providing examples of amendments that are considered not likely to involve significant hazards consideration (48 FR 14870). One such example (ii) of an action involving no significant hazards consideration is a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specification. The changes proposed by this Application fit this example.

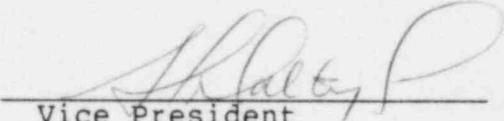
The proposed changes do not involve a significant hazards consideration since they do not:

- (1) involve a significant increase in the probability or consequences of an accident previously evaluated since the more conservative testing requirements provide added confidence that the drywell-to-suppression chamber bypass flow area is within limits.
- (2) create the possibility of a new or different kind of accident from any accident previously evaluated since more conservative surveillance requirements do not establish a new potential accident precursor.
- (3) involve a significant reduction in a margin of safety since the proposed change would prevent long-term operation with one drywell-suppression chamber vacuum breaker in the position between "fully closed" and "3 degree open". Consequently the margin of safety is

enhanced since the potential for some bypass leakage is reduced.

The Plant Operational Review Committee and the Nuclear Review Board have reviewed these proposed changes to the Technical Specifications and have concluded that they do not involve an unreviewed safety question or a significant hazards consideration and will not endanger the health and safety of the public.

Respectfully submitted,
PHILADELPHIA ELECTRIC COMPANY

By 
Vice President

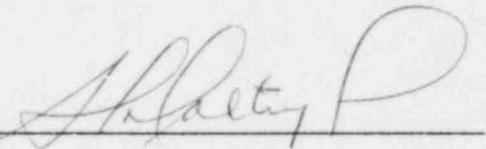
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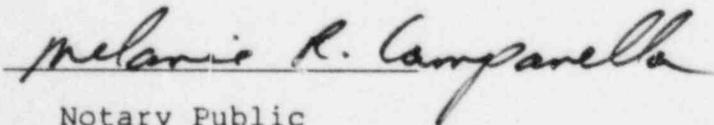
COUNTY OF PHILADELPHIA :

S. L. Daltroff, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company, the Applicant herein; that he has read the foregoing Application for Amendment of Facility Operating License and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.



Subscribed and sworn to
before me this 29th day
of October, 1986



Notary Public

MELANIE R. CAMPANELLA

Notary Public, Philadelphia, Philadelphia Co.
My Commission Expires February 12, 1990