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NUCLEAR GROUP HEADQUARTERS

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NUCLEAR ENGINEERING & SERVICES DEPARTMENT

10 CFR 50.90

May 18, 1992

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20551

SUBJECT: Peach Bottom Atomic Power Station, Units 2 and 3
Technical Specifications Change Request 92-02

Dear Sir:

Philadelphia Electric Company (PECo) hereby submits Technical Specifications Change Request (TSCR) No. 92-02, in accordance with 10 CFR 50.90, requesting a change to Appendix A of the Peach Bottom Facility Operating Licenses. The proposed changes concern extending the frequency of inspecting and replacing the Main Steam Safety Valves (SV) and Relief Valves (RV) from every refuel outage to a 24 month testing interval (i.e., a maximum of 30 months accounting for the allowable grace period). This change is being requested to support a change to a 24 month fuel cycle at Peach Bottom. To analyze the effects of the change to a 24 month fuel cycle the guidelines propagated in NRC Generic Letter 91-04, "Changes In Technical Specification Surveillance Intervals to Accommodate a 24 - Month Fuel Cycle" were followed.

As discussed in our February 11, 1992 letter (D. R. Helwig to USNRC) additional requests will be submitted to address all of the effects of a 24 month fuel cycle; however, because of the impact on operations and outage scheduling at Peach Bottom we are requesting that this change be reviewed and approved by September 1992.

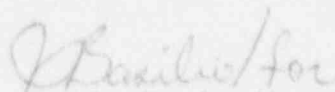
Attachment 1 to this letter describes the proposed changes, and provides justification for the changes. Attachment 2 contains the revised Technical Specification pages.

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If you have any questions regarding this matter, please contact us.

Very truly yours,


G. J. Beck, Manager
Licensing Section

Enclosures: Affidavit, Attachment 1, Attachment 2

cc: T. T. Martin, Administrator, Region I, USNRC
J. J. Lyash, USNRC Senior Resident Inspector, PBAPS
W. P. Dornisfe Commonwealth of Pennsylvania

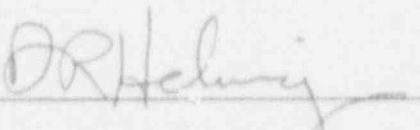
COMMONWEALTH OF PENNSYLVANIA:

: ss.

COUNTY OF CHESTER :

D. R. Helwig, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company; the Applicant herein; that he has read the attached Technical Specifications Change Request (Number 92-02) for Peach Bottom Facility Operating Licenses DPR-44 and DPR-56, 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.


Vice President

Subscribed and sworn to
before me this 20th day
of May 1992.


Notary Public

Notarial Seal
Eric A. Santon, Notary Public
Tredyffrin Twp., Chester County
My Commission Expires July 10, 1995

ATTACHMENT 1

PEACH BOTTOM ATOMIC POWER STATION
UNITS 2 AND 3

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

TECHNICAL SPECIFICATION CHANGE REQUEST
92-02

"Change to the Frequency of Main Steam Safety
and Relief Valve Inspections and Tests"

Supporting Information for Changes 4 Pages

Philadelphia Electric Company (PECo), Licensee under Facility Operating Licenses DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station (PBAPS) Unit No. 2 and Unit No. 3, respectively, requests that the Technical Specifications contained in Appendix A to the Operating Licenses be amended. Proposed changes to the Technical Specifications are indicated by vertical bars in the margin of page 147. The proposed revised page 147 for each unit are included in Attachment 2.

The proposed changes are being requested to support changing the fuel cycle at PBAPS from 18 to 24 months. In reviewing the effects of this change PECo made a conservative assumption that surveillance frequencies defined as either "REFUEL OUTAGE" or "OPERATING CYCLE" were to be considered as an 18 month interval with a 25 percent grace period. In completing the analysis of the effects of changing to a 24 month cycle with a 25 percent grace period it became apparent that some changes would have a much more severe impact on operations and outage planning than others. The impact of this determination was discussed in our February 11, 1992 letter (D. R. Helwig to USNRC) and as discussed in that letter these changes were identified and labelled as PRIORITY I changes. This request includes the single PRIORITY I change identified at PBAPS. Additional effects are being evaluated and a change request which addresses those changes will be submitted by July 1992. The original schedule submitted in the February 11, 1992 letter indicated that these additional change requests would be submitted in June; however, that schedule has now been extended to July of 1992. This change request should be considered a single change and we are requesting that this change be reviewed and approved by September 30, 1992. This date is being requested because the subject TS requirements have a significant impact on outage scheduling.

Description of Changes

- (1) The Licensee proposes a change to Section 4.6.D of the PBAPS TS. This section defines the inspection and testing requirements of the Main Steam Line Safety (SV) and Relief Valves (RV). The SVs and RVs are installed at PBAPS to prevent overpressurization of the reactor coolant pressure boundary. All RVs can be manually operated for depressurization. Five of the RVs have the additional safety function of automatically depressurizing the reactor to permit the Low Pressure Coolant Injection (LPCI) and Core Spray (CS) systems to operate. In this Automatic Depressurization System (ADS) mode the five RVs provide a backup to the High Pressure Coolant Injection (HPCI) system.

The testing of the SV and RV provides assurance that if required these valves will be able to perform their design function. The current TS Section 4.6.D requires that at least one safety valve and 5 relief valves be checked or replaced with bench tested relief valves once per operating cycle. The RV and SV are required to meet a TS set pressure acceptance criteria of plus or minus one (1) percent. For performing the historical review recommended by Generic Letter (GL) 91-04 those previous tests in which the valve failed the TS limit were considered as failures. The proposed section 4.6.D will read:

"At least one safety valve and 5 relief valves shall be checked or replaced with bench checked valves every 24 months. All valves will be tested every two cycles." [emphasis added]

The reference to testing all valves every two cycles was reviewed under a 10 CFR 50.59 evaluation. It was determined that it is acceptable to test all valves every 54 months - two 24 month operating cycles with a single 6 month grace period. It should be noted that the reference to "two cycles" in the quoted section of TS is being interpreted as an 18 month fuel cycle. This interpretation is consistent with the current definition section of PBAPS TS. This and all other references to "cycles" will continue to be interpreted as an 18 month cycle until all of the effects of changing the definition of cycle to 24 months have been evaluated and approved.

- (2) The Licensee proposes a change to Section 4.6.D.2 of the PBAPS TS. This section defines the frequency to disassemble and inspect a relief valve. This surveillance requirement is meant to detect possible deteriorations that could affect relief valve performance. The current Section 4.6.D.2 requires at least one relief valve be disassembled and inspected each refueling outage. The proposed TS 4.6.D.2 will read:

"At least one of the relief valves shall be disassembled and inspected every 24 months"
[emphasis added]

Safety Discussion

The NRC GL 91-04 provided guidelines for determining the safety impact of a change required to go to a 24 month fuel cycle. As recommended by the GL, PECO evaluated the effect on safety of the change in surveillances intervals

to accommodate a 24 month fuel cycle. This evaluation concluded that this proposed amendment does not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. From this determination it was concluded that the effect on safety is small. In addition, PECO confirmed that the historical maintenance and surveillance data support this conclusion.

Specifically, the historical data is summarized below.

Change Request (1)

A review of the ST documentation identified that a total of 6 SV tests and 30 RV tests were performed since 1987; when as found data was first taken or recorded. A review of the as found data did not identify any time based failure mechanism; therefore, PECO has concluded that extending the surveillance frequency for this TS requirement will not have an adverse effect on safety.

Change Request (2)

A review of the Surveillance test documentation identified that at least 9 RV disassemblies and inspections were performed for the two units since 1982 with no documented problems. Therefore, PECO has concluded that extending the surveillance frequency for this TS requirement will not have an adverse affect on safety.

No Significant Hazards Consideration

The two change requests proposed in this Application do not constitute a significant hazards consideration in that:

- 1) The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated because the availability and response of the valves in the event of an accident is unchanged. The changes being proposed do not change any of the accident precursors; therefore, the probability of an accident remains the same. The availability of the valves to mitigate the consequences of an accident remain essentially the same. Any change in the possibility of a failure in these valves due to less frequent testing is insignificant given that the surveillance history does not indicate any time based failure mechanism.

- ii) The proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated because the proposed change does not make any physical changes to the plant and the extension of the surveillance interval will not introduce any new failure mechanisms. No physical changes to the plant are being made as a result of this request; therefore, no new accident initiators or precursors are being introduced. The only change being proposed is an extension of an existing surveillance test for the Main Steam SV and RV. The existing evaluation for PBAPS has already considered the failure of a MS RV. The extended operating time does not introduce any new accidents scenarios.
- iii) The proposed changes do not involve a significant reduction in a margin of safety because the proposed surveillance frequency is adequate to detect SV/RV failures or deteriorations. It can be concluded that an increase in the interval to reflect a 24 month operating cycle will have a negligible impact on the margin of safety. The ability to detect a failure or deterioration in the performance of SV and RV is essentially unchanged by extending the surveillance frequency; therefore, the likelihood that these valves are available to perform their design functions is the same and the margin of safety provided by these valves is essentially unchanged.

Information Supporting an Environmental Assessment

An environmental impact assessment is not required for the changes proposed by this Application because the changes conform to the criteria for "actions eligible for categorical exclusion" as specified in 10 CFR 51.22(c)(9). The proposed changes do not involve a significant hazards consideration as discussed in the preceding section. The proposed changes do not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite. In addition, the proposed changes do not involve an increase in the individual or cumulative occupational radiation exposure.

Conclusion

The Plant Operations Review Committee and the Nuclear Review Board have reviewed these proposed changes and have concluded that they do not involve an unreviewed safety question and are not a threat to the health and safety of the public.