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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

AMENDMENT NO. 74 TO LICENSE NO. DPR-44
AND
AMENDMENT NO. 73 TO LICENSE NO. DPR-56

PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3

PHILADELPHIA ELECTRIC COMPANY

DOCKETS NOS. 50-277 AND 50-278

I. INTRODUCTION

By letter dated September 15, 1980, the Philadelphia Electric Company (the licensee) proposed changes to the Technical Specifications (TSs) appended to Facility Operating Licenses Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station, Units Nos. 2 and 3. The changes involve the incorporation of certain of the TMI-2 Lessons Learned Category "A" requirements. The licensee's request is in direct response to the NRC staff's letter dated July 2, 1980.

II. BACKGROUND INFORMATION

By our letter dated September 13, 1979, we issued to all operating nuclear power plants requirements established as a result of our review of the TMI-2 accident. Certain of these requirements, designated Lessons Learned Category "A" requirements, were to have been completed by the licensee prior to any operation subsequent to January 1, 1980. Our evaluation of the licensee's compliance with these Category "A" items was attached to our letter to Philadelphia Electric Company dated February 26, 1980.

In order to provide reasonable assurance that operating reactor facilities are maintained within the limits determined acceptable following the implementation of the TMI-2 Lessons Learned Category "A" items, we requested that licensees amend their TSs to incorporate additional Limiting Conditions of Operation and Surveillance Requirements, as appropriate. This request was transmitted to all licensees on July 2, 1980. Included therein were model specifications that we had determined to be acceptable. The licensee's application is in direct response to our request. Each of the issues identified by the NRC staff and the licensee's response is discussed in the Evaluation below.

III. EVALUATION

1. Emergency Power Supply/Inadequate Core Cooling

As applicable to Boiling Water Reactors (BWRs), we indicated that water level instrumentation is important to post-accident monitoring and that surveillance

of this instrumentation should be performed. The licensee's response to this request stated that the current surveillance requirements for the reactor water level instrumentation at Peach Bottom is more conservative than our guidance. Specifically, instrument checks at Peach Bottom are performed once per shift instead of once per month. The licensee's application did include a proposed revision to bring the operability requirements into agreement with our guidelines. These guidelines, simply stated, require (1) two operable instrument channels; (2) with less than two channels operable, operability of two channels must be restored within seven days or reactor shutdown is required; (3) with less than one channel operable, operability must be restored within 48 hours. The licensee's application is consistent with these guidelines. Therefore, we find the proposed revision to be acceptable.

2. Valve Position Indication

Our requirements for installation of a reliable position indicating system for relief and safety valves were based on the need to provide the operator with a diagnostic aid to reduce the ambiguity between indications that might indicate either an open relief/safety valve or a small line break. Such a system did not need to be safety grade provided that backup methods of determining valve position are available. Since the indicating system provides no automatic action, the licensee proposed that limiting conditions for operation in the event of an inoperable channel are not appropriate and that the TSs should be limited to surveillance requirements. The licensee presented a discussion of the safety significance of this valve position indicating system and discussed alternate methods for diagnosing valve failure. We have reviewed the licensee's submittal and agree with his basic premise that there are a number of alternate backup methods for determining that a valve is open. However, these alternate methods would not provide indications that a valve has reseated. Therefore, we suggested that the TSs should require at least a primary or backup system of valve position indication to be operable or the reactor should be shutdown after 30 days. A 30-day limit is consistent with current practices for post-accident monitoring instrumentation. Accordingly, we find the licensee's submittal as modified by the NRC staff and agreed to by the licensee to be acceptable.

3. Containment Isolation

Our request indicated that the Specifications should include a Table of Containment Isolation Valves which reflect the diverse isolation signal requirement of this Lessons Learned issue. The licensee's response stated that his application dated July 16, 1980, was responsive to this request.

The licensee's request dated July 16, 1980, concerns the addition of isolation valves in the instrument nitrogen compressor suction line and the radioactive gas sampler line to ensure redundant isolation. This application is under review and will be processed separately. However, we have reviewed existing

Table 3.7.1 of the Peach Bottom Specifications which reflects diverse isolation signals to each valve. Therefore, we conclude that no further change is required.

4. Shift Technical Advisor (STA)

Our request indicated that the TSs related to minimum shift manning should be revised to reflect the augmentation of a STA. The licensee's application would add one STA to each shift to perform the function of accident assessment. The individual performing this function will have at least a bachelor's degree or equivalent in a scientific or engineering discipline with special training in plant design, and response and analysis of the plant for transients and accidents. Part of the STA duties are related to operating experience review function. Based on our review, we find the licensee's submittal to satisfy our requirements and is acceptable.

5. Integrity of Systems Outside Containment

Our request indicated that licensees should be required to periodically conduct a System Integrity Measurements Program to prevent the release of significant amounts of radioactivity to the environment via leakage from engineered safety systems and auxiliary systems which are located outside reactor containment. The licensee's program includes provisions for a preventive maintenance program and periodic visual inspections. The program also includes system leak test measurements at frequencies not to exceed refueling cycle intervals.

Based on our review we find that inclusion of this requirement in the Administrative Controls Section of the TSs satisfies our requirement and is acceptable.

6. Iodine Monitoring

Our request indicated that the licensees should implement a program which will ensure the capability to determine the airborne iodine concentration in areas requiring personnel access under accident conditions. The licensee's program includes training of personnel, procedures for monitoring and provisions for maintenance of sampling and analysis equipment.

Based on our review we find that inclusion of this requirement in the Administrative Controls Section of the TSs satisfies our requirement and is acceptable.

IV. ENVIRONMENTAL CONSIDERATIONS

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.

V. 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: October 28, 1980