UNITED STATES NUCLEAR REGULATORY COMMISSION

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-354

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-57 issued to Public Service Electric & Gas Company and Atlantic City Electric Company, (the licensees), for operation of the Hope Creek Generating Station, located in Salem County, New Jersey.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

The proposed amendment would:

(1) Increase the Minimum Critical Power Ratio (MCPR) safety limit in Technical Specifications (TS) 2.1.2 and 3/4.4.1 and in the Bases sections related to these TSs.

(2) Replace the curves in Figures 3.2.1-1 and 3.2.1-2 to provide Maximum Average Planar Heat Generation limit curves for two new fuel types that will replace two existing fuel types during the next operating cycle (Cycle 2).

(3) Change TS 3/4.2.3 to provide new MCPR limits for Cycle 2 operation providing limits for two exposure ranges rather than a single exposure range as in the existing TS. The two ranges are a) from Beginning-of-Cycle (BOC) to End-of-Cycle (EOC) minus 2000 MWD/ST and b) from EOC minus 2000 MWD/ST to EOC. The ACTION and SURVEILLANCE REQUIREMENTS for TS 3/4.2.3 would also be

revised to reflect this new option of using either of the two new exposure ranges and to delete the existing option of operating at 400°F or less.

(4) Revise existing Figure 3.2.3-1, MCPR vs Tau, by providing the MCPR vs Tau curves for the first exposure range discussed above and revise existing Figure 3.2.3-2, K_f Factor by deleting the K_f Factor curve and replacing it with the MCPR vs Tau curves for the second exposure range discussed above.

(5) Add a new Figure 3.2.3-3 with a new K_f Factor curve for Cycle 2 operation.

(6) Delete Table 3.2.3-1 which currently provides MCPR Feedwater Heating Capacity Adjustments for operation below 400°F.

(7) Revise the TSs to allow operation above the 100% Load Line and up to 105% Rated Core Flow by:

a) Extending the K_f Factor curve up to 110% of Rated Core Flow (instead of the current 100%).

b) Clamping the Upscale Setpoints for the Rod Block Monitor in TS Table 3.3.6-2 at the 100% recirculation flow value.

c) Increasing the Motor Generator Set mechanical and electrical stops in TS 4.4.1.1.3 to physically allow for increased core flow.

The proposed action is in accordance with the licensee's application for amendment dated December 14, 1987.

The Need for the Proposed Action:

The proposed change to the TS is required in order to provide the licensee with appropriate safety limits for operation with the Cycle 2 reload core, greater operational flexibility during the initial portions of the operating

cycle, improved power ascension capability to full power and additional ability to compensate for reactivity reduction due to fuel exposure during the operating cycle.

Environmental Impacts of the Proposed Action:

The proposed revisions to the Technical Specification limits adequately compensate for the proposed changes in the fuel load and for operation with increased core flow and extended load line limits. The proposed changes do not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

With regard to potential non-radiological impacts, the proposed change to the TS involves systems located within the restricted area as defined in 10 CFR Part 20. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed amendment.

The Notice of Consideration of Issuance of Amendment and Opportunity for Prior Hearing in connection with this action was published in the Federal Register on January 14, 1988 (53 FR 972). No request for hearing or petition for leave to intervene was filed following this notice.

Alternative to the Proposed Action:

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Hope Creek Generating Station, dated December, 1984.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated December 14, 1987 which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Pennsville Public Library, 190 South Broadway, Pennsville, New Jersey 08070.

Dated at Bethesda, Maryland, this 7th day of March 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

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