



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 71 TO FACILITY OPERATING LICENSE NO. NPF-57

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

HOPE CREEK GENERATING STATION

DOCKET NO. 50-354

1.0 INTRODUCTION

By letter dated October 26, 1993, as supplemented by letter dated December 14, 1993, the Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Hope Creek Generating Station, Technical Specification (TS). The requested changes would reduce the MINIMUM CHANNELS OPERABLE requirement for suppression pool water temperature instruments, Accident Monitoring ACTION STATEMENTS, and remove ACTIONS and Surveillance Requirements for suppression pool (chamber) temperature and level instruments. The December 14, 1993, letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The Suppression Pool Water Temperature Instrumentation consists of one sensor for each suppression pool bay. The 16 sensors are located symmetrically around the outboard side of the suppression pool, 3' - 0 1/2" below the normal minimum water level. This will ensure that the sensors remain submerged and thus properly monitor pool temperature. The 16 sensors are divided into two independent channels. The eight individual sensor inputs per channel are continuously averaged electronically to provide two average bulk water temperatures. The average bulk water temperature of each channel is both indicated and recorded in the main control room for each channel.

Currently, the MINIMUM CHANNELS OPERABLE requirement for the Suppression Pool Water Temperature found in TS Table 3.3.7.5-1, "Accident Monitoring Instrumentation," is two. The accident monitoring instrumentation listed in Table 3.3.7.5-1 are Type A, Category 1 variables that all require one minimum channel operable, except for the Suppression Pool Water Temperature. Regulatory Guide 1.97, "Instrumentation For Light-Water-Cooled Nuclear Power Plants To Assess Plant And Environs Conditions During And Following An Accident," provides for plant-specific determination of Type A variables. This change lowers the required MINIMUM CHANNELS OPERABLE from two to one for the suppression pool water temperature instrumentation. The suppression pool water temperature instrumentation provides adequate redundancy and there is an acceptable method of measuring the suppression pool water temperature in case

of failure of one channel. In the event that one channel's averaging circuit becomes inoperable, the eight individual sensors of the inoperable channel can be manually read, averaged, and compared to the OPERABLE channel. This change is consistent with NUREG-1433, "Standard Technical Specifications, General Electric Plants BWR/4."

The licensee is changing Action 80 associated with TS Table 3.3.7.5-1. The change extends the allowable out of service time (AOT) for the suppression pool water temperature instruments and the other accident monitoring instruments listed in the table that require two channels to be operable (Instruments 1 through 10 in Table 3.3.7.5-5). The change extends the AOT if the number of operable channels is one less than the required number of operable channels from 7 days to 30 days. Also, with the number of operable channels one less than the minimum number of operable channels, the AOT is extended from 48 hours to 7 days, except for the Primary Containment Hydrogen/Oxygen Concentration Analyzer and Monitor (Instrument 8 in Table 3.3.7.5-5) and the Drywell Atmosphere Post-Accident Radiation Monitor (Instrument 10 in Table 3.3.7.5-5). For these two instruments, the AOT with the number of operable channels one less than the minimum number of operable channels, is 72 hours.

There is sufficient redundancy in each of the measured parameters that extending the AOT will not prohibit the operators from obtaining information to take any specified manual action that is necessary for the safety systems to accomplish their safety function for design basis events. Also, these changes in AOT are in agreement with the Post Accident Monitoring Instrumentation Section in NUREG-1433.

The licensee is removing the ACTIONS and surveillances from TS 3/4.6.2.1, "Containment Systems Suppression Chamber," associated with the suppression pool temperature and level instrumentation. These instruments are included in TS Table 3.3.7.5-1 for accident monitoring instrumentation which is consistent with NUREG-1433. The instrumentation provides alarm and monitoring functions only. They are a part of the routine operational monitoring and are applicable to plant-specific controls.

Therefore, the staff concludes that reducing the MINIMUM CHANNELS OPERABLE requirement for the suppression pool water temperature instrumentation, extending the allowable out of service time (AOT) for Instruments 1 through 10 in Table 3.3.7.5-1, Accident Monitoring Instrumentation, and removing the ACTIONS and surveillances in TS 3/4.6.2.1 is acceptable.

The footnote section in TS Table 3.3.7.5-1 is being revised such that footnote (a) and (c) are deleted, and footnote (b) is renamed footnote (##) as well as the superscript associated with Primary Containment Isolation Valve Position Indication. The footnotes are also being reordered to be more consistent with the table. Footnote (a) is being removed because the availability requirements specified in TS 3/4.6.2.1 are being removed and covered in the Accident Monitoring Instrumentation ACTION Section. Footnote (c) associated

with Safety/Relief Valve (SRV) Position Indication is an outdated note which allows an acoustic monitor for an SRV to be inoperable until September 21, 1987, or until the first forced outage of sufficient time to make repairs. These changes are editorial in nature and the staff finds them acceptable.

In Table 3.3.7.5-1, Action Statements, Action 80, items b and c, the pen and ink version of the TS have the statement "... and in COLD SHUTDOWN in the following 24 hours." The revised TS have "... and in COLD SHUTDOWN within the following 24 hours." This is an editorial correction that is consistent with other action statements. The staff finds this acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State Official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (58 FR 67861). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: May 25, 1994