



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 82 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 September 29, 1994, the Public Service Electric & Gas Company (the licensee) submitted a request for a change to the Hope Creek Generating Station (HCGS), Technical Specifications (TSs). The proposed Technical Specification changes represent revisions to Sections 3/4.3.7.2, "Seismic Monitoring Instrumentation," and 3/4.3.7.3, "Meteorological Instrumentation." The proposed revisions would remove the requirements from the TS and relocate the appropriate descriptive information and testing requirements to the Hope Creek Updated Final Safety Analysis Report (UFSAR).

2.0 BACKGROUND

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to include TS as part of the license. The Commission's regulatory requirements related to the content of the TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify what matters are to be included in a plant's TS.

The Commission has provided guidance for the contents of the TS in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement"), (58 FR 39132) published in the Federal Register July 22, 1993, in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety."

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Consistent with this approach, the Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows: (1) Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety. As a result, existing TS requirements which fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TS, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other, licensee-controlled documents. These criteria were subsequently incorporated into the regulations by an amendment to 10 CFR 50.36 (60 FR 36953).

### 3.0 EVALUATION

#### Seismic Monitoring Instrumentation

The licensee has proposed to relocate the requirements of TS 3/4.3.7.2, "Seismic Monitoring Instrumentation," to the UFSAR. Section VI(a)(3) of Appendix A to 10 CFR Part 100, requires that seismic monitoring instrumentation be provided to promptly determine the response of those nuclear power plant features important to safety in the event of an earthquake. This capability is required to allow for a comparison of the measured response to that used in the design basis for the unit. Comparison of such data is needed to (1) determine whether the plant can continue to be operated safely, and (2) permit such timely action as may be appropriate. The requirements do not address the need for seismic monitoring instrumentation that would automatically shut down the plant when an earthquake occurs which exceeds a predetermined intensity.

The capability of the plant to withstand a seismic event or other design-basis accident is determined by the initial design and construction of systems, structures, and components. The instrumentation is used to alert operators to the seismic event and evaluate the plant response. The Final Policy Statement explained that instrumentation to detect precursors to reactor coolant pressure boundary leakage, such as seismic instrumentation, is not included in the first criterion. As discussed above, the seismic instrumentation does not serve as a protective design feature or part of a primary success path for events which challenge fission product barriers by actuating protective equipment or serve any direct role in the mitigation of an accident.

The licensee has proposed to relocate these provisions to the UFSAR such that future changes to the operation and surveillance of the Seismic Monitoring Instrumentation could be made under 10 CFR 50.59. The staff has concluded

that the seismic monitoring instrumentation does not satisfy the final policy statement criteria and need not be included in the TS. Likewise, the staff has found that the existing TS is neither specifically required by 10 CFR 50.36, or §182a of the Atomic Energy Act and is not required to avert an immediate threat to the public health and safety. Relocation of the seismic monitoring instrumentation requirements to the UFSAR, and control of changes to those requirements in accordance with 10 CFR 50.59, is therefore acceptable.

#### Meteorological Instrumentation

The licensee has also proposed to relocate requirements of 3/4.3.7.3, "Meteorological Instrumentation," to the UFSAR. In 10 CFR 50.47, "Emergency Plans," and 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," the Commission requires power plant licensees to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The meteorological monitoring instrumentation is used to measure environmental parameters (wind direction, speed, and air temperature differences) which may affect distribution of fission products and gases following a design basis accident to be used in connection with the plans for coping with radiological emergencies, pursuant to 10 CFR 50.34(b), and to provide a basis for estimating maximum potential annual radiation doses resulting from radioactive materials released in gaseous effluents, pursuant to 10 CFR 50.36a(a)(2).

Timely access to accurate local meteorological data is important for estimating potential radiation doses to the public and for determining appropriate protective measures. In 10 CFR 50.36a(a)(2), the Commission requires nuclear power plant licensees to submit annual reports specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and airborne effluents and such other information as may be required by the NRC to estimate maximum potential annual radiation doses to the public. A knowledge of meteorological conditions in the vicinity of the reactor is important in providing a basis for estimating annual radiation doses resulting from radioactive materials released in airborne effluents. Accordingly, the meteorological monitoring instrumentation serves a useful function in estimating radiation doses to the public from either routine or accidental releases of radioactive materials to the atmosphere.

The meteorological monitoring instrumentation does not serve to ensure that the plant is operated within the bounds of initial conditions assumed in design basis accident and transient analyses or that the plant will be operated to preclude transients or accidents. Likewise, the meteorological instrumentation does not serve as part of the primary success path of a safety sequence analysis used to demonstrate that the consequences of these events are within the appropriate acceptance criteria. The meteorological monitoring instrumentation does not serve a primary protective function so as to warrant inclusion in the TS in accordance with the criteria of the Final Policy



Statement. Further, existing TS 3/4.3.7.3 is neither specifically required by 10 CFR 50.36, or §812a of the Atomic Energy Act, and is not required to avert an immediate threat to the public health and safety.

Accordingly, the staff has concluded that the meteorological instrumentation does not satisfy the Final Policy Statement criteria and need not be included in TSs. Relocation of the meteorological monitoring instrumentation requirements to the UFSAR, and control of changes to those requirements in accordance with 10 CFR 50.59, is therefore acceptable.

#### 4.0 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.

#### 5.0 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. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluent 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 (60 FR 39449). 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.

#### 6.0 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: September 25, 1995