



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 73 TO FACILITY LICENSE NO. DPR-71 AND
AMENDMENT NO. 99 TO FACILITY LICENSE NO. DPR-62
CAROLINA POWER & LIGHT COMPANY
BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
DOCKET NOS. 50-325 AND 50-324

1.0 Introduction

By letter dated March 2, 1984, the Carolina Power & Light Company (the licensee) submitted proposed changes to the Technical Specifications appended to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant (BSEP), Units 1 and 2. The proposed changes would modify the Technical Specifications in response to NRC Generic Letter No. 83-36 dated November 1, 1983. These Technical Specifications are related to NUREG-0737 items which have to do with monitoring of radiation releases, containment conditions and control room habitability during and following accident conditions and impose additional limiting conditions for operation and surveillance requirements for the instrumentation for measuring the above quantities.

2.0 Discussion

In November 1980, the staff issued NUREG-0737, "Clarification of TMI Action Plan Requirements" which included all TMI Action Plan items approved by the Commission for implementation at nuclear power reactors. NUREG-0737 identifies those items for which Technical Specifications (TSs) were scheduled for implementation after December 31, 1981. The staff provided guidance on the scope of Technical Specifications for all of these items in Generic Letter 83-36. Generic Letter 83-36 was issued to all Boiling Water Reactor (BWR) licensees on November 1, 1983. In this Generic Letter, the staff requested licensees to:

- a. Review their facility's Technical Specifications to determine if they were consistent with the guidance provided in the Generic Letter, and
- b. Submit an application for a license amendment where deviations or absence of Technical Specifications were found.

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By letter dated March 2, 1984, Carolina Power & Light Company (the licensee) responded to Generic Letter 83-36 by submitting Technical Specification change requests for Brunswick Units 1 and 2. This evaluation covers the following TMI Action Plan items:

- Noble Gas Effluent Monitors (II.F.1.1)
- Containment High-Range Radiation Monitor (II.F.1.3)
- Containment Pressure Monitor (II.F.1.4)
- Containment Hydrogen Monitor (II.F.1.6) Unit 2 only
- Control Room Habitability Requirements (III.D.3.4)

Other TMI action plan items covered in Generic Letter 83-36 are as follows:

- The TSs for Item II.F.1.2 - Sampling and Analysis of Plant Effluents have been completed by Amendment No. 63 for Brunswick Unit 1 and Amendment No. 81 for Brunswick Unit 2.
- The TSs for Item II.F.1.5 - Containment Water Level Monitor, Have been completed by Amendment No. 63 for Brunswick Unit 1 and Amendment No. 81 for Brunswick Unit 2.
- The TSs for Item II.F.1.6 - Containment Hydrogen Monitor have been completed by Amendment No. 63 for Brunswick Unit 1.
- The TSs for Item II.B.3 - Post-Accident Sampling, have been completed by Amendment No. 70 for Brunswick Unit 1 and Amendment No. 98 for Brunswick Unit 2.

3.0 Evaluation:

a. Noble Gas Effluent Monitors (II.F.1.1)

The licensee has supplemented the existing normal range monitors to provide noble gas monitoring in accordance with Item II.F.1.1. Proposed TSs were submitted that meet the intent of the guidelines provided in our Generic Letter 83-36. We conclude that the TSs for Item II.F.1.1 are acceptable.

b. Containment High-Range Radiation Monitor (II.F.1.3)

The licensee has installed two in-containment monitors in each Brunswick Unit that is consistent with the guidance of TMI Action Plan Item II.F.1.3. Generic Letter 83-36 provided guidance for limiting conditions of operation and surveillance TSs for these monitors. The licensee proposed TSs which are consistent with the guidance provided in our Generic Letter 83-36. We conclude that the TSs for Item II.F.1.3 are acceptable.

c. Containment Pressure Monitor (II.F.1.4)

Each Brunswick Unit was provided with two supplementary channels of monitoring containment pressure following an accident. The licensee proposed TSs that are consistent with the guidelines contained in Generic Letter 83-36. We conclude that the TSs for Item II.F.1.4 are acceptable.

d. Containment Hydrogen Monitor (II.F.1.6)

Brunswick Unit 2 is currently installing containment hydrogen monitors that provide the capability required by TMI Action Plan Item II.F.1.6. The proposed Brunswick Unit 2 TSs contain appropriate limiting conditions of operation and surveillance for these monitors. We conclude that the proposed TSs are acceptable as they are consistent with the guidance contained in Generic Letter 83-36.

e. Control Room Habitability (II.D.3.4)

The guidance of NUREG-0737 requires assurance on the part of the licensee that control room operators will be adequately protected against the effects of an accidental release of toxic and/or radioactive gases from sources either onsite or offsite. Generic Letter 83-36 provided guidance on the toxic gas detection system, and control room emergency air filtration system.

The licensee has approved TSs for the chlorine detection system in place. However, in response to Generic Letter 83-36, the licensee has changed the alarm setpoint from 1ppm to 5ppm. We have reviewed the proposed change to the TSs for the chlorine detection system and conclude that the proposed TSs are acceptable as they meet the intent of our guidance contained in generic Letter 83-36.

4.0 Environmental Considerations

The amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments involve 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 amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet 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 amendments.

5.0 Conclusions

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: August 13, 1984