Docket

March 31, 1992

Docket No. 50-261

Mr. R. A. Watson
Senior Vice President
Nuclear Generation
Carolina Power & Light Company
P. O. Box 1551
Raleigh, North Carolina 27602

Dear Mr. Watson:

SUBJECT: ISSUANCE OF AMENDMENT NO. 139 TO FACILITY OPERATING LICENSE NO. DPR-23 REGARDING REQUIRED OPERABILITY OF FIRE PROTECTION FEATURES - H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 (TAC NO. M82900)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 139 to Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2. This amendment changes the Technical Specifications (TS) in response to your request dated March 5, 1992, as supplemented March 6, 1992.

The amendment will add a footnote to TS 3.14.3.2.a and 3.14.4.2.a which will suspend the requirements of these fire protection TS for the duration of the containment Integrated Leak Rate Test and the Structural Integrity Test.

A copy of the related Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's bi-weekly Federal Register notice.

Sincerely,

Orignal signed by:

Ronnie H. Lo, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 139 to DPR-23
2. Safety Evaluation

cc w/enclosures:
See next page
*See previous concurrence

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

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-261

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 139
License No. DPR-23

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Carolina Power & Light Company (the licensee), dated March 5, 1992, as supplemented March 6, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment; and paragraph 3.B. of Facility Operating License No. DPR-23 is hereby amended to read as follows:

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B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 139 , are hereby incorporated in the license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Elinor G. Adensam

Elinor G. Adensam, Director
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 31, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 139

FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

Remove Pages	Insert Pages
3.14-3	3.14-3

a. For the Containment Vessel Electrical Penetration Area initiate an inspection once per shift with particular emphasis on identifying any potential hazards for fire.*

b. For all other areas, within one (1) hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish an hourly fire watch patrol.

c. Restore the system to operable status within 14 days or prepare and submit a Special Report to the Commission within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to operable status.

3.14.4 Fire Hose Stations

3.14.4.1 Each fire hose station in Table 3.14.2 shall be operable.

3.14.4.2 With a hose station in Table 3.14.2 inoperable:

a. Route an additional equivalent capacity hose to the unprotected area from an operable hose station within one hour if the inoperable fire hose is the primary means of fire suppression; otherwise route the additional hose within 24 hours.*

b. Restore the hose station to operable status within 14 days or prepare and submit a Special Report to the Commission within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to operable status.

3.14.5 CO_2 Fire Protection System

3.14.5.1 The CO_2 Fire Protection Systems for 1) the Diesel Generator Rooms and, 2) North and South Cable Vaults shall be operable, each:

a. With a complete bank (19 cylinders for the Diesel Generator Room and 18 cylinders in the North and South Cable Vaults) of fully charged CO_2 cylinders in service,

b. With the system aligned to deliver to the protected areas, and

c. With automatic initiation logic operable. For the Diesel Generators, this includes two dedicated heat detectors per room for CO_2 actuation.

d. A CO_2 cylinder shall be deemed fully charged if it contains not less than 90% of the full charge weight.

3.14.5.2 With any of the CO_2 Fire Protection Systems in a condition of readiness less than required by the above:

* For the duration of containment vessel ILRT and SIT pressurization, temperature stabilization, data collection, and depressurization, the requirements of Technical Specifications 3.14.3.2.a and 3.14.4.2.a may be suspended.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 139 TO FACILITY OPERATING LICENSE NO. DPR-23

CAROLINA POWER & LIGHT COMPANY

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

DOCKET NO. 50-261

1.0 INTRODUCTION

By letter dated March 5, 1992, as supplemented March 6, 1992, the Carolina Power & Light Company (licensee) submitted a request for changes to the H. B. Robinson Steam Electric Plant, Unit No. 2, Technical Specifications (TS). The requested changes will add a footnote to TS 3.14.3.2.a and 3.14.4.2.a that will suspend the requirements of these fire protection TS for the duration of the containment Integrated Leak Rate Test (ILRT) and the Structural Integrity Test (SIT). The March 6, 1992, letter requested exigent handling of the amendment request of March 5, 1992.

2.0 EVALUATION

Technical Specification 4.4.1.1 requires that an ILRT be periodically performed on the containment vessel. In addition, TS 4.4.4.2 requires that a SIT also be periodically conducted. The licensee states that these two tests (ILRT and SIT) will be performed concurrently.

Pretest requirements in 10 CFR 50, Appendix J, state in part that "all vented systems shall be drained of water or other fluids to the extent necessary to assure exposure of the system containment isolation valves to containment air test pressure and to assure that they will be subjected to the post-accident differential pressure." This requirement applies to fire water systems that supply water to a pre-action sprinkler system protecting the Containment Vessel Electrical Penetration area, and various manual fire hose stations inside containment. Prior to, and for the duration of, conducting the ILRT, three fire protection systems inside containment will be out of service because they must be drained of water so that the fire protection valves which serve as containment isolation valves are exposed to the full containment test pressure.

When the pre-action sprinkler system is out of service, TS 3.14.3.2 requires that a once-per-shift inspection of the Containment Vessel Electrical Penetration area be initiated. Similarly, TS 3.14.4.2 requires that

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equivalent capacity hose be laid from an operable hose station to any location with an out-of-service hose station.

The above fire protection TS requirements cannot be met while the ILRT and SIT are being conducted. Therefore, the licensee has requested a change in these TS to waive the two requirements for the duration of the ILRT and the SIT. Specifically, the licensee has proposed adding a footnote to the subject TS requirements as follows:

> For the duration of containment vessel ILRT and SIT pressurization, temperature stabilization, data collection and depressurization, the requirements of Technical Specifications 3.14.3.2.a and 3.14.4.2.a may be suspended.

To compensate for the inoperability of the fire water pre-action system and the fire hose stations for the duration of the ILRT and SIT, the licensee has committed the following procedural controls:

> 1. The fire Water System to containment will be among the last system isolated prior to commencing the ILRT. As part of the final inspection prior to securing the containment for the test, a thorough fire inspection will be completed by the fire protection staff. This inspection will assure that no fire hazards or sources of combustible material such as flammable liquids or pressurized containers are present. Further, nonessential electrical loads, located within the containment and not required for the ILRT or maintenance of shutdown core cooling, will be de-energized.
>
> 2. The operability of the Fire Detection System will be checked once per shift as required by Technical Specifications. If a fire "Trouble" alarm is received, a determination will be made if the cause is in the Fire Alarm Panel or in the containment. If a fire detection "Fire" alarm is received, the Control Room will closely monitor the plant equipment status for any indications of a problem. The alarm will be reset as soon as possible. The Control Room operator and the ILRT coordinator will continue to observe for other indications of a fire concern. (It should be noted that the ILRT will require 24 temperature sensors to be installed in containment which will provide an indication of a temperature rise.) The Shift Supervisor, Shift Outage Manager, ILRT Coordinator, and fire protection staff will determine if a containment depressurization and entry is necessary.

The actions the licensee committed to above would result in two areas of safety improvements regarding fire hazards:

1. The fire inspection prior to containment closure, coupled with the de-energization of nonessential electrical loads significantly reduce two major sources of fire hazards; the presence of combustible materials and fire hazards caused by electrical faults or overloads.

2. The close monitoring of fire by plant personnel including the Shift Supervisor, the Shift Outage Manager, ILRT Coordinator, and fire protection staff will assure timely fire suppression action, including containment depressurization and entry if necessary. The capability of fire detection will be enhanced by the presence of 24 temperature sensors during the ILRT.

Based on the above evaluation of the compensating action, we conclude that the licensee's proposed changes to TS 3.14.3.2a and 3.14.4.2a, which will only be in effect during the limited duration of the ILRT and SIT, are acceptable.

3.0 Exigent Circumstances

The licensee in its March 6, 1992, supplement to the original amendment application dated March 5, 1992, requested the TS Amendment be approved on an exigent basis. The licensee states that initial concerns were expressed by operations personnel on February 4, 1992 during a review of the ILRT procedure. In response to these concerns, an investigation was initiated involving a review of the test procedure, the applicable TS, the testing practices used at other sites, and the approach used in 1987 during performance of this test. This investigation was completed on February 21, 1992, and resulted in a determination that a TS amendment was required to support proper performance of the ILRT under the TS requirements. A request for the TS amendment was prepared and finalized on March 5, 1992.

Without exigent processing of this TS amendment request, it is projected that the performance of the ILRT and SIT will be delayed approximately one week and extend the outage completion date by the same duration. Since the identification of the concern in February, 1992, the licensee has acted prudently in investigating the safety concerns of this issue. The licensee stated that they undertook prompt action to fully investigate the issues and prepare the documentation for the TS amendment request. It is apparent that, even with best-effort, a timely request submittal could not be made and the exigency became unavoidable.

Accordingly, the Commission, pursuant to 10 CFR 50.91(a)(6), finds that exigent circumstances exist. The March 13, 1992 Federal Register Notice (57 FR 8938) gave an opportunity for hearing and allowed two weeks for public comment on the proposed amendment. Thus, the requirements of 10 CFR 50.91(a)(6)(i)(A) have been satisfied.

4.0 Final No Significant Hazards Consideration

The Commission has provided standards for determining whether a significant hazards consideration exists (10 CFR 50.92(c)). A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility, in accordance with the proposed amendment, would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from an accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The following evaluation in relation to the three standards demonstrates that the proposed amendment does not involve a significant hazards consideration.

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

   The proposed amendment would provide a exemption from the compensatory actions required when the specified pre-action system and fire hose stations are inoperable during performance of the ILRT and the SIT. During the performance of the ILRT, the plant will be in cold shutdown. Also, the licensee will perform thorough containment walkdown by the fire protection staff prior to initiation of the ILRT and SIT to ensure that any combustible materials are minimized or eliminated.

   The licensee postulated that the supression of a fire may be slightly delayed due to an unspecified delay in confirming and responding to an actual fire in the containment. However, by de-energizing nonessential equipment within the containment, and minimizing or eliminating combustible materials prior to ILRT pressurization, the probability of a fire occurring will be extremely small. In fact, since the containment will be secured immediately following the fire protection walkdown, there will be no possibility of transient combustibles entering the area. Therefore, the compensatory actions, taken together with the conditions imposed by the ILRT, demonstrate that there will be no significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

   The plant will be in cold shutdown throughout the duration of the ILRT when the proposed amendment will be in effect. The possibility of a fire occurring will be significantly reduced by the de-energization of nonessential equipment, and the pre-test walkdown of containment by the fire protection staff. The proposed amendment will not affect the ability of the plant to maintain safe shutdown conditions, and no unusual plant evolutions will take place. The accidents analyzed in Chapter 15 of the Updated Final Safety Analysis Report bound the conditions created by the proposed amendment. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed amendment does not involve a significant reduction in the margin of safety.

   By de-energizing all nonessential components within the containment which are not required for ILRT or maintenance of shutdown core cooling, potential fire ignition sources will be minimized. Also, a thorough containment walkdown by the fire protection staff prior to ILRT pressurization will ensure that any combustible materials are minimized. Since the containment will be secured following this walkdown, there will be no change in the combustible loading within the containment, and a once per shift inspection for fire hazards would not contribute to safety. Therefore, there is adequate assurance that any postulated impact on the margin of safety will be minimal and the proposed change does not involve a significant reduction in the margin of safety.

Based on the foregoing, the NRC staff has concluded that the standards of 10 CFR 50.92(c) are satisfied. Therefore, the Commission has made a final determination that the proposed amendments do not involve a significant hazards consideration.

5.0 STATE CONSULTATION

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

6.0 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 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 (57 FR 8938, March 13, 1992). 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.

7.0 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.

Principal Contributors: D. Notley
R. Lo

Date: March 31, 1992

AMENDMENT NO. 139 TO FACILITY OPERATING LICENSE NO. DPR-23 - ROBINSON, UNIT NO. 2

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