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RECIP.NAME RECIPIENT AFFILIATION
Document Control Branch (Document Control Desk)

SUBJECT: Application for amend to License DPR-23,adding footnote to TS 3.14.3.2a & 3.14.4.2.a which will suspend requirements of fire protection for duration of containemnt integrated leak rate test & structural integrity test.

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G. E. VAUGHN
Vice President
Nuclear Services Department

MAR 05 1992

SERIAL: NLS-92-074
10CFR50.90

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT 2
DOCKET NO. 50-261/LICENSE NO. DPR-23
REQUEST FOR LICENSE AMENDMENT
REQUIRED OPERABILITY OF FIRE PROTECTION FEATURES

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company (CP&L) hereby requests a revision to the Technical Specifications (TS) for the H. B. Robinson Steam Electric Plant, Unit No. 2 (HBR2). The proposed change will add a footnote to Technical Specifications 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 (ILRT) and Structural Integrity Test (SIT).

The need for this amendment was discovered during preparations for the ILRT which is to be performed during Refueling Outage 14 currently scheduled to commence on March 28, 1992. The ILRT is scheduled to begin on April 7, 1992. The ILRT is performed early in the outage to ensure that the containment is tested in an "as-found" condition with valves closed in a normal manner, and before any maintenance is performed on components tested by the ILRT. Consequently, priority handling of this amendment is requested with an individual Federal Register pre-notice, if necessary.

As discussed in detail in the enclosures, this change has a minimal impact on the safety of the plant in that pre-test inspections, no access for transient combustibles, and other compensatory actions significantly reduce the likelihood of fire initiation during this very limited time period. Additionally, a significant amount of attention is focused on overall containment status during the test, thus reasonably assuring the early detection of potential problems and subsequent prompt action.

Enclosure 1 provides a detailed description of the proposed changes and the basis for the changes.

Enclosure 2 details, in accordance with 10CFR50.91(a), the basis for the Company's determination that the proposed changes do not involve a significant hazards consideration.

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Enclosure 3 provides an environmental evaluation which demonstrates that the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9). Therefore, pursuant to 10CFR51.22(b), no environmental assessment needs to be prepared in connection with the issuance of the amendment.

Enclosure 4 provides page change instructions for incorporating the proposed revisions.

Enclosure 5 provides the proposed Technical Specification pages.

In accordance with 10CFR50.91(b), CP&L is providing the State of South Carolina with a copy of the proposed license amendment.

Please refer any questions regarding this submittal to Mr. R. W. Prunty at (919) 546-7318.

Yours very truly,

G. E. Vaughn

JSK/jbw

Enclosures:
1. Basis for Change Request
2. 10CFR50.92 Evaluation
3. Environmental Considerations
4. Page Change Instructions
5. Technical Specification Pages

cc: Mr. S. D. Ebneter
Mr. L. W. Garner
Mr. R. Lo
Mr. Heyward G. Shealy (SC)
Attorney General (SC)

G. E. Vaughn, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.

Eleanor C. Chappell
Notary (Seal)

ELEANOR C. CHAPPELL NOTARY PUBLIC WAKE COUNTY, N.C.

My commission expires: 2/6/96

(1558RNP)

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
NRC DOCKET NO. 50-261/LICENSE NO. DPR-23
REQUEST FOR LICENSE AMENDMENT
REQUIRED OPERABILITY OF FIRE PROTECTION FEATURES

BASIS FOR CHANGE REQUEST

Background

Technical Specification 4.4.1.1 requires that an Integrated Leak Rate Test (ILRT) be performed on the Containment Vessel; the ILRT is performed at a frequency specified in Technical Specification 4.4.1.1.g. The Structural Integrity Test (SIT) required by Technical Specification 4.4.4.2 will be performed concurrently with the ILRT. Technical Specification 4.4.1.1.c requires that the test duration meet the requirements of 10CFR50 Appendix J and ANSI N45.4 (1972) requirements for leakage rate measurements, and shall be extended for a sufficient period of time to verify, by superimposing a known leak rate on containment, the validity and accuracy of the leakage rate results.

The 10CFR50, Appendix J pretest requirements 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 requires that the fire water systems supplying containment be vented and drained such that the fire protection valves serving as containment isolation valves are exposed to full containment test pressure.

Technical Specification 3.14.3.1 requires that the fire water Pre-Action System protecting the containment electrical penetration area be operable. However, to satisfy ILRT test conditions as described above, this system will be isolated and inoperable as required by the ILRT test procedure. Technical Specification 3.14.3.2 states that with the Fire Water Pre-Action System in a condition of readiness less than required, then:

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

Technical Specification 3.14.4.1 states, "Each fire hose station in Table 3.14.2 shall be operable". Fire Hose Stations 12 through 19, as specified in Table 3.14.2, will be inoperable as required by the ILRT procedure. Technical Specification 3.14.4.2 states,

> "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."

The requirements of the ILRT render compliance with the Technical Specifications stated above impossible because the fire water systems supplying the containment will be removed from service and vented. Since the containment will be

pressurized to 43 psig, inspection during the time that the fire water systems are inoperable would be impossible from a personnel safety standpoint, and would jeopardize the successful completion of the ILRT. The Pre-Action System and Fire Hose Stations could be returned to operable status with no undue delay.

Proposed Change

The proposed change would add the following footnote to Technical Specifications 3.14.3.2.a and 3.14.4.2.a:

* For the duration of the 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.

Basis

The Fire Protection Program at the H. B. Robinson Plant is described in Section 9.5.1 of the Updated FSAR. The objective of the Fire Protection Program is to minimize both the probability and consequences of a postulated fire. As discussed in detail in the Updated FSAR, the probability and consequences of fires are minimized by a combination of design features, procedural controls, and personnel training, including a well trained fire brigade.

The Fire Water System supplies the containment building fire hose stations and pre-action fire suppression (sprinkler) systems for the electrical penetration area. Fire water is supplied by two 4-inch supply lines which penetrate the containment boundary.

The basis for Technical Specification 3.14 states that the operability of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. Collectively, the capability of all of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the Fire Protection Program. Fire hose stations are provided for alternate fire fighting capability in affected areas when primary equipment is out of service. When fire suppression water systems are inoperable, prompt corrective actions are taken since this system provides the major fire suppression capability of the plant.

In order 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 following procedural controls will be applied:

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.

Conclusions

Based on considerations discussed above, it is concluded that the proposed amendment will maintain an acceptable level of safety during the performance of the ILRT.

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
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REQUIRED OPERABILITY OF FIRE PROTECTION FEATURES

10CFR50.92 EVALUATION

The Commission has provided standards in 10CFR50.92(c) for determining whether a significant hazards consideration exists. 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, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. Carolina Power & Light Company has reviewed this proposed license amendment request and determined that its adoption would not involve a significant hazards determination. The bases for this determination are as follows:

Proposed Change

The proposed change would add the following footnote to Technical Specifications 3.14.3.2.a and 3.14.4.2.a:

* For the duration of the 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.

Basis

This change does not involve a significant hazards consideration for the following reasons:

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 temporary exemption from the compensatory actions required when the specified pre-action system and fire hose stations are inoperable during concurrent performance of the Integrated Leak Rate Test (ILRT) and the Structural Integrity Test (SIT). This exemption will apply only to these very specific conditions for a finite period of time.

   During the performance of the ILRT, the plant will be in cold shutdown. By de-energizing all components within the containment that are not required for either ILRT performance 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 initiation if the ILRT will ensure that any combustible materials are minimized or eliminated.

   The fire hose station and Pre-Action Systems are not required for achieving and maintaining either hot or cold shutdown.

It may be postulated that the consequences of a fire may be slightly increased due to an unspecified delay in confirming and responding to an actual fire in the containment. Upon receipt of alarms for two trains of the fire detection system, there will be some time required for assessment of the situation, and some unspecified delay in responding to the fire while the ILRT is suspended and containment is accessed. 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. As such, a once per shift inspection should be unnecessary since there should be no change in the "potential hazards for fire." In summary, although the proposed amendment may have a minor impact upon the ability to promptly respond to an actual fire, the compensatory actions taken, together with the conditions imposed by the ILRT, ultimately 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, if not eliminated, 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.

   As discussed in item 1, above, the margin of safety could be considered to be impacted by the proposed amendment. However, by de-energizing all nonessential components within the containment which are not required for ILRT performance 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 or eliminated. 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 should not be needed.

   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.

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ENVIRONMENTAL CONSIDERATIONS

10CFR51.22(c)(9) provides criterion for and identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. A proposed amendment to an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant hazards consideration; (2) result in a significant change in the types or significant increase in the amounts of any effluents that may be released off-site; (3) result in an increase in individual or cumulative occupational radiation exposure. Carolina Power & Light Company has reviewed this request and determined that the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9). Pursuant to 10CFR51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of the amendment. The basis for this determination follows:

Proposed Change

The proposed change would add the following footnote to Technical Specifications 3.14.3.2.a and 3.14.4.2.a:

* For the duration of the 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.

Basis

The change meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9) for the following reasons:

1. As demonstrated in Enclosure 2, the proposed amendment does not involve a significant hazards consideration.

2. The proposed amendment does not result in a significant change in the types or significant increase in the amounts of any effluents that may be released off-site. The change merely allows for the inoperability of certain fire protection features for brief periods with a suspension of the required actions specified in the Technical Specifications. As such, the change cannot affect the types or amounts of any effluents that may be released off-site.

3. The proposed amendment does not result in an increase in individual or cumulative occupational radiation exposure. The change merely allows for the inoperability of certain fire protection features for brief periods with a suspension of the required actions specified in the Technical Specifications. Therefore, the amendment has no affect on either individual or cumulative occupational radiation exposure.