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SUBJECT: Application for amend to license DPR-23. Amend would clarify definition of operability for charging pumps.

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10 CFR 50.90

Carolina Power & Light Company

Robinson Nuclear Plant
3581 West Entrance Road
Hartsville SC 29550

RNP File No: 13510HA
Serial: RNP-RA/95-0084

JUN 03 1995

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

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23
REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS
REGARDING OPERABILITY OF CHARGING PUMPS DURING POWER OPERATION

Gentlemen:

In accordance with 10 CFR 50.90, Carolina Power & Light (CP&L) Company is submitting a request for change to the Technical Specifications (TS) for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. The proposed TS change clarifies the definition of operability for the charging pumps by adding a footnote to TS Section 3.2.2.a. The footnote states that connectability to the emergency power sources is not required for the charging pumps to be considered operable. The charging pumps do not serve an Engineered Safety Feature system function and are not automatically loaded on emergency power sources for any limiting fault (i.e., Condition IV) accident conditions.

In a telephone conversation with the NRC on February 2, 1995, we stated our position that the original and current TS requirements are based on the availability of three charging pumps, none of which is automatically loaded onto the emergency power sources. Therefore, the connectability of any of the three charging pumps to an emergency power source is not required to meet the Limiting Condition for Operation of TS Section 3.2.2.a which requires that only two charging pumps be operable. However, we verbally committed to administratively refrain from considering the "A" charging pump operable even though it is connectable to the dedicated shutdown bus which is powered by the dedicated shutdown diesel generator, to satisfy the requirements of TS Section 3.2.2.a, until this proposed change to the TS is submitted. By submittal of this proposed change to the TS, we intend to resume including the "A" charging pump as one of the charging pumps that satisfy the requirements of TS Section 3.2.2.a.

Enclosure 1 provides an affidavit as required by 10 CFR 50.30(b).

Enclosure 2 provides a detailed description of the requested change and the basis for the change.

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Enclosure 3 details, in accordance with 10 CFR 50.91(a), the basis for CP&L's conclusion that the requested change does not involve a significant hazards consideration.

Enclosure 4 provides environmental considerations which demonstrate that the requested change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental assessment needs to be prepared in connection with the issuance of the change to the TS.

Enclosure 5 provides page change instructions for incorporating the requested change.

Enclosure 6 provides the proposed TS pages.

In accordance with 10 CFR 50.91(b), CP&L is providing the State of South Carolina with a copy of the requested change to the TS.

In order to allow time for procedure revision and orderly incorporation into copies of the TS, CP&L requests that the requested change, once approved by the NRC, be issued such that implementation will occur within 60 days of issuance of the change to the TS.

Please refer any questions regarding this submittal to Mr. A. L. Garrou at (803) 857-1544.

Very truly yours,



R. M. Krich
Manager - Regulatory Affairs

Enclosures:

1. Affidavit
2. Basis for Change Request
3. 10 CFR 50.92 Evaluation
4. Environmental Considerations
5. Page Change Instructions
6. Technical Specifications Page

c: Mr. Max K. Batavia, Chief, Bureau of Radiological Health (SC)
Mr. S. D. Ebnetter, Regional Administrator, USNRC, Region II
Ms. B. L. Mozafari, USNRC Project Manager, HBRSEP
Mr. W. T. Orders, USNRC Senior Resident Inspector, HBRSEP
Attorney General (SC)

Enclosure 1
Affidavit

C. S. Hinnant, having been first duly sworn, did depose and say that the information contained in letter RNP-RA/95-0084 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.

C S Hinnant

Albert Garrison
Notary (Seal)

My commission expires:

March 22, 2005

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DURING POWER OPERATION

BASIS FOR CHANGE REQUEST

Requested Change

In accordance with 10 CFR 50.90, Carolina Power & Light (CP&L) Company is submitting a request for a change to the Technical Specifications (TS) for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. The purpose of this change is to clarify the definition of operability for the charging pumps.

The requested change to the TS is to add a footnote to TS Section 3.2.2.a to clarify that emergency power supplies are not required for the charging pumps to be considered operable in accordance with the definition in TS Section 1.3. The bases statement for TS Section 3.2.2 is also changed to clarify that the charging pumps are not accident mitigation equipment (i.e., Engineered Safety Feature (ESF) equipment assumed to function in an accident analyzed in the Updated Final Safety Analysis Report, i.e., UFSAR), and therefore, do not require that these pumps be capable of being powered by the on-site emergency power supplies. We are also proposing a correction of a minor typographical error at the top of TS Page 3.2-4.

Basis

The charging pumps are used for normal control of Reactor Coolant System (RCS) coolant inventory and boron concentration, and the charging pumps provide seal injection to the Reactor Coolant Pumps (RCPs). As discussed in the bases for TS Section 3.2, an alternate means of injection is to depressurize the RCS and use the Safety Injection (SI) pumps for coolant makeup and boron injection.

The proposed clarifications to the TS are provided to ensure consistency with the HBRSEP Current Licensing Basis (CLB). Two of the three charging pumps are connectable to emergency power supplies for the purpose of achieving higher reliability of the charging function. However, the two charging pumps capable of being powered from the emergency bus are stripped from their respective emergency buses by the Emergency Diesel Generator (EDG) load sequencer upon a Loss of Off-site Power (LOOP) and SI signal. The remaining charging pump is connectable to the dedicated shutdown bus to ensure safe shutdown in the

event of a fire in certain fire areas and to cope with a Station Blackout (SBO) event.¹ The dedicated shutdown bus is a non-safety related power bus powered by a dedicated EDG, that was installed to comply with the NRC requirements for fire protection² and later credited in the SBO coping analysis in response to 10 CFR 50.63, "Loss of all alternating current power." This emergency power supply arrangement is consistent with the current and original design bases of the charging pumps.

In a meeting with the U. S. Atomic Energy Commission on February 19, 1970, during the original plant licensing process, the proposed TS for HBRSEP were reviewed in detail. During that meeting, CP&L was asked to change the Limiting Condition for Operation (LCO) for the Component Cooling Water (CCW) pumps to include specific requirements concerning the ability to power the CCW pumps from the on-site EDGs. CP&L was not asked to similarly change the proposed LCO for the charging pumps. The design configuration of both the charging pumps and CCW pumps were similar at that time. In Figure 8.2-3 of the HBRSEP Final Facility Description and Safety Analysis Report, Amendment 12, both the "A" charging pump and the "A" CCW pump are shown to be powered from non-emergency power buses. The effect of this 1970 NRC requested change to the original proposed TS was to require both the "B" and "C" CCW pumps to be operable at all times because only the "B" and "C" CCW pumps are powered by the emergency power buses. No such restriction was added to the original TS for the charging pumps, and consequently, any two operable charging pumps of the three were considered sufficient to satisfy the TS LCO.

The originally licensed configuration of the charging pumps' respective electrical power supplies, as well as, the current configuration, do not require emergency power sources to assure operability of the charging pumps to perform their intended function in support of limiting the effects of a Condition II, "Faults of Moderate Frequency," event as described in UFSAR Section 15.0.1. The "A" Charging Pump is powered by manual action within one (1) hour to the dedicated shutdown diesel in the event of an SBO, which is an enhancement to the original plant design. The "B" and "C" charging pumps are shed from the emergency buses upon a LOOP and SI Signal. Operability of the charging pumps is not credited as an ESF to mitigate the consequences of a Condition IV, "Limiting Faults," event as described in UFSAR Section 15.0.1. The "intended function" of the charging pumps as defined in TS

¹SBO as defined in 10 CFR 50.2 means the complete loss of alternating current (ac) electric power to the essential and nonessential switchgear buses in a nuclear power plant (i.e., loss of off-site electric power system concurrent with turbine trip and unavailability of the on-site emergency ac power system). SBO does not assume loss of direct current power, nor assume a single failure, nor assume a design basis accident.

²Branch Technical Position APCS 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976," Appendix A.

Section 1.3 does not include the emergency power supplies to the charging pumps as necessary attendant equipment for the charging pumps to be operable.

The requested change to TS clarifying that the emergency power supplies are not required for the charging pumps to be considered operable is consistent with NUREG-1431, "Standard Technical Specifications (STS) for Westinghouse Plants." NUREG-1431 does not include a Limiting Condition for Operation, and therefore the STS defined operability requirements, for the charging pumps.

Conclusion

The use of any 2 of the 3 charging pumps meets TS Sections 3.2.2 and 3.2.3 and is consistent with our plant design, original licensing basis and CLB. Because the charging pumps do not perform an ESF function, the emergency power supplies to the charging pumps are not considered necessary attendant equipment for the charging pumps to be operable in accordance with Section 1.3 of the TS.

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10 CFR 50.92 EVALUATION

We have concluded that the requested change to the H. B. Robinson Steam Electric Plant, Unit No. 2 Technical Specifications (TS) to clarify operability of the charging pumps, does not involve a Significant Hazards Consideration. In support of this conclusion, an evaluation of each of the three (3) standards set forth in 10 CFR 50.92 is provided below.

Requested Change

The requested change to the TS is to add a footnote to TS Section 3.2.2.a to clarify that emergency power supplies are not required for the charging pumps to be considered operable in accordance with the definition in TS Section 1.3. The bases statement to TS Section 3.2.2 is also changed to clarify that the charging pumps are not accident mitigation equipment (i.e., Engineered Safety Feature equipment assumed to function in an accident analyzed in the Updated Final Safety Analysis Report), and therefore, do not require that these pumps be capable of being powered by the on-site emergency power supplies. We are also proposing a correction of a minor typographical error at the top of TS Page 3.2-4.

Basis

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

1. The requested change does not involve a significant increase in the probability or consequences of an accident previously evaluated. The requested change clarifies that the emergency power sources are not required for the operability of the charging pumps. Operation of the charging pumps is not considered in the assumptions for initiation of any analyzed accident and is not credited for accident mitigation in any analyzed accidents in the safety analysis report. Therefore, the availability of emergency power sources to the charging pumps does not affect the probability of occurrence or consequences of an analyzed accident in the safety analysis report.
2. The requested change does not create the possibility of a new or different kind of accident from any accident previously evaluated. The requested change clarifies that the emergency power sources are not required for the operability of the charging pumps. The design requirements of the charging pumps to provide reactor coolant inventory and boron inventory control are not changed. The operability of the emergency power source to the charging pumps is not a precursor to any accident

scenario. Failure of the charging pumps is bounded by the plant design which strips the charging pumps from the emergency buses under certain conditions. Since the change does not involve changes in the operation of the plant, or physical or equipment changes or involve controls for accident mitigation equipment, the requested change will not create the possibility of new or different kind of accident from any accident previously evaluated.

3. The requested change clarifies that the emergency power sources are not required for the operability of the charging pumps. Since the charging pumps are stripped from the emergency buses in the event of a loss of power and safety injection, emergency power sources to the charging pumps are not guaranteed to mitigate the consequences of an analyzed accident. As a result, no credit is taken for the charging function in analyzed accidents and the margin of safety as described in the safety analysis report is unchanged. Therefore, the requested change does not involve a significant reduction in a margin of safety.

Based on the above significant hazards evaluation, Carolina Power & Light Company has concluded that the requested change does not involve any significant hazards considerations.

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ENVIRONMENTAL CONSIDERATIONS

10 CFR 51.22(c)(9) provides criteria for identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. A requested change to an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the requested change 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; or (3) result in an increase in individual or cumulative occupational radiation exposure. Carolina Power & Light Company has reviewed this request and concluded that the requested change 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 needs to be prepared in connection with the issuance of the change to the Technical Specifications (TS). The basis for this conclusion follows.

Requested Change

The requested change to the TS is to add a footnote to TS Section 3.2.2.a to clarify that emergency power supplies are not required for the charging pumps to be considered operable in accordance with the definition in TS Section 1.3. The bases statement to TS Section 3.2.2 is also changed to clarify that the charging pumps are not accident mitigation equipment (i.e., Engineered Safety Feature equipment assumed to function in an accident analyzed in the Updated Final Safety Analysis Report), and therefore, do not require that these pumps be capable of being powered by the on-site emergency power supplies. We are also proposing a correction of a minor typographical error at the top of TS Page 3.2-4.

Basis

The requested change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) for the following reasons.

1. As demonstrated in Enclosure 3, the requested change does not involve a significant hazards consideration.
2. The requested change 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 requested change clarifies that the emergency power sources are not required for the operability of the charging pumps. The requested change does not involve: (1) radiological

effluents or effluent release limits, (2) system operation or the ability to respond to operational transients, or (3) changes to radiological effluents or dose rates from plant systems or equipment. As such, the change can not affect the types or amounts of any effluents that may be released off-site.

3. The requested change does not result in an increase in individual or cumulative occupational radiation exposure. The requested change clarifies that the emergency power sources are not required for the operability of the charging pumps. No operation of the plant involving the accumulation of occupational dose by individuals is affected by the proposed change. Therefore, the change has no affect on either individual or cumulative occupational radiation exposure.

Enclosure 5 to Serial: RNP-RA/95-0084

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PAGE CHANGE INSTRUCTIONS

<u>Removed Page</u>	<u>Inserted Page</u>
3.2-1	3.2-1
3.2-4	3.2-4

Enclosure 6 to Serial: RNP-RA/95-0084

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TECHNICAL SPECIFICATION PAGES