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RECIP.NAME Document Control Branch (Document Control Desk)

RECIPIENT AFFILIATION

SUBJECT: Application for amend to License NPF-63, revising TSs 3.8.2.1,3.8.2.2,3.8.3.1 & 3.8.3.2 re dc electrical power sys battery chargers.

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NOTES: Application for permit renewal filed.

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# **Carolina Power & Light Company**

P.O. Box 1551 • Raleigh, N.C. 27602

JUN 29 1992

SERIAL: NLS-92-153

10CFR50.90

R. B. STARKEY, JR. Vice President Nuclear Services Department

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

SHEARON HARRIS NUCLEAR POWER PLANT DOCKET NO. 50-400/LICENSE NO. NPF-63 REQUEST FOR LICENSE AMENDMENT DC POWER SOURCES

#### 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 Shearon Harris Nuclear Power Plant (SHNPP). The proposed amendment revises TS 3.8.2.1, 3.8.2.2, 3.8.3.1, and 3.8.3.2 concerning DC Electrical Power System battery chargers. Specifically, the proposed change would allow the battery chargers to be removed from the DC bus for a short time provided the associated battery bank remains fully charged.

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.

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 North Carolina with a copy of the proposed license amendment.

(1651HNP)

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

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

Yours very truly,

R. B. Starkey, Jr.

# LSR/jbw

# Enclosures:

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

cc: Mr. Dayne H. Brown

Mr. S. D. Ebneter

Mr. N. B. Le

Mr. J. E. Tedrow

R. B. Starkey, Jr., 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.

My commission expires: 2/6/9

PUBLIC COUNTY CO

#### ENCLOSURE 1

SHEARON HARRIS NUCLEAR POWER PLANT
NRC DOCKET NO. 50-400/LICENSE NO. NPF-63
REQUEST FOR LICENSE AMENDMENT
DC POWER SOURCES

# BASIS FOR CHANGE REQUEST

# Background

The Shearon Harris Nuclear Power Plant (SHNPP) DC Electrical Power System is designed such that two full-capacity battery chargers are available to energize each DC bus. Normally, one charger is energizing the bus and the other is in standby. If the operating charger fails for any reason, plant operations personnel energize the standby battery charger and place it on the bus to return the battery bank to float. During this period, when neither battery charger is energizing the DC bus, the current wording of Technical Specification 3.8.3.1 could be interpreted to require the DC bus and all equipment that requires DC power to be declared inoperable. Further, Technical Specification 3.0.3 would be entered since there is no action specified in Technical Specification 3.8.3.1 for an inoperable battery charger. During this time, the DC bus would be entirely capable of performing its required function with the battery serving as the power source. Also, when the DC bus is reenergized from the battery charger and equipment is restored to an operable status, this event would require the opposite train Emergency Diesel Generator to be tested to satisfy Technical Specification 3.8.1.1.B if the associated Emergency Diesel Generator was declared inoperable when the DC bus was declared inoperable.

# Proposed Change

The proposed Technical Specification change would allow the battery chargers to be removed from the DC bus for a short time provided the associated battery bank remains fully charged, as evidenced by no Category A limit from Technical Specification Table 4.8-2 being exceeded.

# Basis

DC Power does not initiate any accident analyzed in Chapter 15 of the Final Safety Analysis Report (FSAR); therefore, no increase in the probability of such accidents would occur. The proposed Technical Specification change does not involve any modifications to plant equipment and therefore does not affect other equipment that could initiate an accident. Current Technical Specifications require that the DC bus be fully energized at all times and the proposed amendment will not change that requirement. Thus, there would be no increase in the consequences of an accident previously evaluated. Additionally, since no new equipment is being added, no new procedures are being created, and no existing procedures are being modified, the proposed amendment would not increase the probability or consequences of an equipment malfunction previously evaluated in the FSAR.

The proposed amendment would allow both battery chargers to be removed from the DC bus for a short time only if the associated battery is verified to be fully energized and functional, as evidenced by additional testing. Neither the operating characteristics of the battery nor of the DC Electrical Power System following a loss of AC Power would be affected by this change. Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from an accident previously evaluated.

The Bases for the electrical power system ensure sufficient power for safe shutdown of the facility and the mitigation and control of accident conditions. The proposed change would ensure that a fully charged battery continues to be available to perform these functions. Therefore, the proposed change would result in no reduction in the margin of safety as defined in the Technical Specifications.

# Conclusions

The proposed change simply recognizes that there may be short periods when both battery chargers are removed from the DC bus. Since a fully charged battery will be verified, these changes will not increase the probabilities or consequences of accidents previously evaluated, create the possibility of new or different accidents, increase the probability or consequences of equipment malfunctions, or reduce the margin of safety. Therefore, there is reasonable assurance that the proposed changes to Technical Specifications 3.8.2.1, 3.8.2.2, 3.8.3.1, and 3.8.3.2 would not adversely affect the health and safety of the public.

#### **ENCLOSURE 2**

SHEARON HARRIS NUCLEAR POWER PLANT
NRC DOCKET NO. 50-400/LICENSE NO. NPF-63
REQUEST FOR LICENSE AMENDMENT
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# 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 Technical Specification change would allow the battery chargers to be removed from the DC bus for a short time provided the associated battery bank remains fully charged, as evidenced by no Category A limit from Technical Specification Table 4.8-2 being exceeded.

#### <u>Basis</u>

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.
  - DC Power is not an initiating event for any accident evaluated in the Final Safety Analysis Report. Further, this Technical Specification change does not involve any plant modifications to plant equipment and therefore does not affect other equipment that could initiate an accident. Technical Specifications require the DC bus to be fully energized and the proposed amendment does not change that requirement. Therefore, there would be no 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 proposed change only allows the battery chargers to be removed from the bus for a short period provided the battery is verified to be fully energized and functional by additional testing. The operating characteristics of the battery or DC power following a loss of AC power are not affected by this change. 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.

The proposed change allows the battery chargers to be removed from the DC bus for a short period provided the associated battery bank remains fully energized, as evidenced by no Category A limit from Technical Specification Table 4.8-2 being exceeded. If the battery bank is fully charged, then the DC bus remains fully capable of performing its required functions during any analyzed plant event. These events all assume that the battery charger is limited by the battery being at full charge as required by Technical Specification surveillances. Thus, the proposed change simply recognizes that a fully charged battery bank is the ultimate source of DC power in the event AC power is lost. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

#### ENCLOSURE 3

SHEARON HARRIS NUCLEAR POWER PLANT
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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 offsite; (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 Technical Specification change would allow the battery chargers to be removed from the DC bus for a short time provided the associated battery bank remains fully charged, as evidenced by no Category A limit from Technical Specification Table 4.8-2 being exceeded.

#### 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 proposed amendment does not introduce any new equipment, nor does it require existing systems to perform a different type of function than they are currently designed to perform. The existing Technical Specification requirement to maintain the DC bus in a fully charged condition at all times is not changed. As such, the change cannot affect the types or amounts of any effluents that may be released offsite.

3. The proposed amendment does not result in an increase in individual or cumulative occupational radiation exposure.

The proposed change does result in Surveillance Requirement 4.8.2.1.a.1 being performed if both battery chargers are removed from the DC bus; however, this surveillance is not performed in an area where personnel are subjected to radiation exposure. Therefore, the amendment has no effect on either individual or cumulative occupational radiation exposure.

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# ENCLOSURE 4

# SHEARON HARRIS NUCLEAR POWER PLANT NRC DOCKET NO. 50-400/LICENSE NO. NPF-63 REQUEST FOR LICENSE AMENDMENT DC POWER SOURCES

# PAGE CHANGE INSTRUCTIONS

Removed Page	<u>Inserted Page</u>		
3/4 8-12	3/4 8-12		
3/4 8-15	3/4 8-15		
3/4 8-16	3/4 8-16		
3/4 8-18	3/4 8-18		