

**Carolina Power & Light Company**

P.O. Box 1551 • Raleigh, N.C. 27602

DEC 18 1989

**A. B CUTTER**  
Vice President  
Nuclear Services Department

SERIAL: NLS-89-245  
10CFR50.90

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  
AREA TEMPERATURE MONITORING

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 for the Shearon Harris Nuclear Power Plant, Unit 1.

Table 3.7-6 of the SHNPP Technical Specifications provides the maximum temperature limits for various areas in the plant. Currently, the maximum temperature limit for Item 19, Tank Area (El 236'), is 122°F. The correct value for this area is 104°F. The proposed change revises Table 3.7-6 to limit the maximum temperature in the Tank Area to 104°F. In addition, Item 17 provides a maximum temperature limit for the Fuel Pool Cooling Pump and Heat Exchanger Area. The proposed change deletes Item 17 from Table 3.7-6.

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

Enclosure 2 details the basis for the Company's determination that the proposed changes do not involve a significant hazards consideration.

Enclosure 3 is 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 impact statement or environmental assessment need to be prepared in connection with the issuance of the amendment.

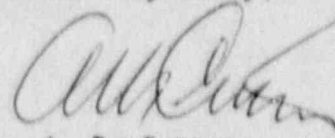
Enclosure 4 provides the proposed Technical Specification pages.

8912220009 891218  
PDR ADOCK 05000400  
P FDC

A001  
/

Please refer any questions regarding this submittal to Mr. Steven Chaplin at (919) 546-6623.

Yours very truly,



A. B. Cutter

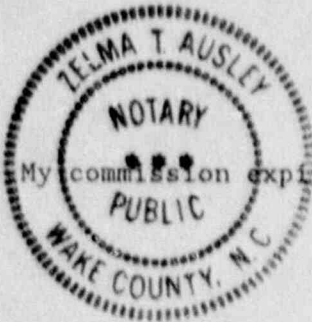
ABC/MAT

Enclosures:

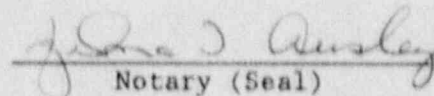
1. Basis for Change Request
2. 10CFR50.92 Evaluation
3. Environmental Evaluation
4. Technical Specification Pages

cc: Mr. R. A. Becker  
Mr. J. E. Tedrow  
Mr. Dayne H. Brown  
Mr. S. D. Ebnetter

A. B. Cutter, 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: February 18, 1990



Zelma T. Ausley  
Notary (Seal)

ENCLOSURE 1

SHEARON HARRIS NUCLEAR POWER PLANT  
DOCKET NO. 50-400/LICENSE NO. NPF-63  
REQUEST FOR LICENSE AMENDMENT  
AREA TEMPERATURE MONITORING

BASIS FOR CHANGE REQUEST

Proposed Change

Table 3.7-6 of the SHNPP Technical Specifications provides the maximum temperature limits for 27 areas in the plant. Currently, the maximum temperature limit for Item 19, Tank Area (El 236'), is 122°F. The correct value for this area is 104°F. The proposed change revises Table 3.7-6 to limit the maximum temperature in the Tank Area to 104°F. In addition, Item 17 provides a maximum temperature limit for the Fuel Pool Cooling Pump and Heat Exchanger Area. The proposed change deletes Item 17 from Table 3.7-6.

Basis

The Bases for Technical Specification 3/4.7.12 states that operation of equipment at excessive ambient temperatures may be detrimental to the long term operability of the equipment. Therefore, the area temperature limitations of Technical Specification 3.7.12 ensure that when safety-related equipment is required to operate that it will not be subject to temperatures in excess of the equipment's environmental qualification. Per the Applicability statement of the LCO, the limits imposed by Specification 3/4.7.12 are only applicable when the equipment in each area is required to be operable as defined and required by other system specific technical specifications.

Item 19 A discrepancy between Table 3.7-6 and FSAR Figure 3.11B-15 was identified. Table 3.7-6 lists the maximum temperature limit for Item 19, Tank Area (El 236'), as 122°F. Figure 3.11B-15 shows the normal maximum temperature in this area to be 104°F. An investigation of the HVAC design calculations indicated that the normal maximum temperature in the Tank Area is 104°F. Safety related equipment in this area is environmentally qualified for a maximum normal temperature of 104°F. The proposed change revises Table 3.7-6 to limit the maximum temperature in the Tank Area to 104°F, thereby reflecting actual plant conditions and equipment qualifications.

Item 17 Technical Specification Table 3.7-6 establishes a maximum temperature limit for the Fuel Pool Cooling Pump and Heat Exchanger Area. As with the temperature limits of the other 26 areas listed in Table 3.7-6, Technical Specification 3/4.7.12 enforces these area limits only when equipment within each area is required Operable by Technical Specifications. However, unlike the other 26 areas, no equipment within Area 17 is required operable by technical specifications. As a result, the 104°F temperature limitation provided in Item 17 is never implemented.

The maximum normal and post-accident peak temperature in this area is 104°F. The peak temperature is ensured by a safety-related ventilation system with redundant trains. The components of the fuel pool cooling system are environmentally qualified for a maximum normal temperature of at least 120°F. As a result, the equipment will not be subject to temperatures in excess of the equipment qualification. Deletion of the



Technical Specification limit for this area will have no affect on assuring the long term operability of the Fuel Pool Cooling System. In addition, the Fuel Pool Cooling System is not required for the safe shutdown of the plant. The safe operation of the unit is not dependent on the establishment of a Technical Specification temperature limit for this area. The unimplemented Area 17 limit can therefore be deleted.

## ENCLOSURE 2

SHEARON HARRIS NUCLEAR POWER PLANT  
DOCKET NO. 50-400/LICENSE NO. NPF-63  
REQUEST FOR LICENSE AMENDMENT  
AFEA TEMPERATURE MONITORING

### 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 consideration. The bases for this determination are as follows:

#### Proposed Change

Table 3.7-6 of the SHNPP Technical Specifications provides the maximum temperature limits for various areas in the plant. Currently, the maximum temperature limit for Item 19, Tank Area (El 236'), is 122°F. The correct value for this area is 104°F. The proposed change revises Table 3.7-6 to limit the maximum temperature in the Tank Area to 104°F. In addition, Item 17 provides a maximum temperature limit for the Fuel Pool Cooling Pump and Heat Exchanger Area. The proposed change deletes Item 17 from Table 3.7-6.

#### Basis

The 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.
  - o The revision lowers the maximum temperature limit for Item 19, Tank Area (El 236'), from 122°F to 104°F, thereby reflecting actual plant conditions. The change does not affect the method by which any safety related equipment performs its intended function and, as such, can not increase the probability of an accident previously evaluated. Lowering the maximum temperature limit ensures that safety related equipment in the area will not be subjected to temperatures in excess of their environmental qualification temperatures. This provides added assurance that the safety related equipment in the area will be operable if required to function. As such, the consequences of previously evaluated accidents are not affected.
  - o Item 17 of Technical Specification Table 3.7-6 establishes a maximum temperature limit for the Fuel Pool Cooling Pump and Heat Exchanger Area whenever Technical Specification required equipment within the area is operating. Since no equipment within this area is addressed by an LCO, the limit imposed by item 17 is never

implemented. The components of the fuel pool cooling system are environmentally qualified for a maximum normal temperature of at least 120°F. The plant design peak area temperature of 104°F is ensured by a redundant safety-related ventilation system. Therefore, the safe operation of the unit is not dependent on the establishment of a Technical Specification temperature limit for this area. Given that the change affects neither the method nor the environment in which any safety related equipment performs its intended function, deletion of this unimplemented temperature limit will not involve a 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 change does not adversely affect the method or environment in which any safety system performs its safety function nor does it introduce any new equipment or require any existing equipment to perform a different type of function than they are currently designed to perform. As such, the proposed amendment can not create the possibility of a new or different kind of accident.
3. The proposed amendment does not involve a significant reduction in the margin of safety. As stated above, the change does not affect the method by which any safety related equipment performs its intended function nor does it introduce any new equipment or require any existing equipment or systems to perform a different type of function than they are currently designed to perform.
  - o Lowering the maximum temperature limit for Technical Specification Table 3.7-6 Item 19, Tank Area (El 236') ensures that safety related equipment in the area will not be subjected to temperatures in excess of their environmental qualification temperatures. This provides added assurance that the safety related equipment in the area will be operable if required to function.
  - o Deletion of the maximum temperature limit for the Fuel Pool Cooling Pump and Heat Exchanger Area does not reduce the margin of safety because 1) the Fuel Pool Cooling Systems are not covered by a separate technical specification and, as such, Item 17 of Technical Specification 3/4-7.12 is administratively never implemented, and 2) the limit represented in the Specification is the same as the maximum normal and post-accident temperature in that area. The 104°F maximum is ensured by a safety-related ventilation system with redundant trains. The components of the fuel pool cooling system are environmentally qualified to at least 120°F. As such, the deletion of the Technical Specification limit for this area will not affect the long term operability of the fuel pool cooling system. Therefore, the margin of safety is not affected by the proposed amendment.



### ENCLOSURE 3

SHEARON HARRIS NUCLEAR POWER PLANT  
DOCKET NO. 50-400/LICENSE NO. NPF-63  
REQUEST FOR LICENSE AMENDMENT  
AREA TEMPERATURE MONITORING

#### ENVIRONMENTAL CONSIDERATION

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; and (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 need to be prepared in connection with the issuance of the amendment. The basis for this determination follows:

#### Proposed Change

Table 3.7-6 of the SHNPP Technical Specifications provides the maximum temperature limits for various areas in the plant. Currently, the maximum temperature limit for Item 19, Tank Area (El 236'), is 122°F. The correct value for this area is 104°F. The proposed change revises Table 3.7-6 to limit the maximum temperature in the Tank Area to 104°F. In addition, Item 17 provides a maximum temperature limit for the Fuel Pool Cooling Pump and Heat Exchanger Area. The proposed change deletes Item 17 from Table 3.7-6.

#### 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 offsite.
  - o The revision lowers the maximum temperature limit for Item 19, Tank Area (El 236'), from 122°F to 104°F, thereby reflecting actual plant conditions and equipment qualifications. The change does not affect the method by which any safety related equipment performs its intended function. Lowering the maximum temperature limit ensures that safety related equipment in the area will not be subjected to temperatures in excess of their environmental qualification temperatures. This provides added assurance that the safety related equipment in the area will be operable if required to function. Therefore, 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 offsite.

c Item 17 of Technical Specification Table 3.7-6 establishes a maximum temperature limit for the Fuel Pool Cooling Pump and Heat Exchanger Area. However no equipment within this area is required operable by technical specifications. Given that Item 17 of Specification 3/4.7.12 applies only when required by other specifications, Item 17 is administratively never implemented. In addition, the components of the fuel pool cooling system are environmentally qualified for a maximum normal temperature of at least 120°F. The maximum normal and post-accident peak temperature in this area is 104°F. Therefore, deletion of this temperature limit will not involve a significant increase in the probability or consequences of an accident previously evaluated.

Therefore, deletion of this temperature limit will not result in a significant change in the types or significant increase in the 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 change to the temperature limits does not result in any increase in surveillance frequencies or additional access of radiation areas. As such, the proposed amendment does not result in an increase in individual or cumulative occupational radiation exposure.