

August 28, 1995

Mr. W. R. Robinson, Vice President
Shearon Harris Nuclear Power Plant
Carolina Power & Light Company
Post Office Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

SUBJECT: ISSUANCE OF AMENDMENT NO. 62 TO FACILITY OPERATING LICENSE
NO. NPF-63 REGARDING RELOCATION OF TECHNICAL SPECIFICATIONS IN
ACCORDANCE WITH NUREG-1431 - SHEARON HARRIS NUCLEAR POWER PLANT,
UNIT 1 (TAC NO. M90767)

Dear Mr. Robinson:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 62 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1. This amendment changes the Technical Specifications in response to your request dated October 24, 1994, as supplemented July 21, 1995.

The amendment revises TS 3/4.3.7.12, Area Temperature Monitoring, and the associated bases to be consistent with the new Standard Technical Specifications for Westinghouse plants. Other changes proposed in your October 24, 1994 letter are under review.

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

Sincerely,

Original signed by:

Ngoc B. Le, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-400

Enclosures:

1. Amendment No. 62 to NPF-63
2. Safety Evaluation

cc w/enclosures:

See next page

DOCUMENT NAME: G:\HARRIS\HAR90767.AM2

OFFICE	LA:PDII-1	PM:PDII-1	PD:PDII-1	OGC	SPLB/BC
NAME	EDunnington	NLe Tde	DMatthews	R. Bachman	CMcCracken
DATE	07/28/95	07/31/95	08/28/95	08/17/95	08/13/95
COPY	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

OFFICIAL RECORD COPY

9508310303 950828
PDR ADOCK 05000400
P PDR

NRC FILE CENTER COPY

DF

Mr. W. R. Robinson
Carolina Power & Light Company

Shearon Harris Nuclear Power Plant
Unit 1

cc:

Mr. R. E. Jones
General Counsel - Legal Department
Carolina Power and Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Mr. J. W. Donahue
Plant Manager - Harris Plant
Carolina Power & Light Company
Shearon Harris Nuclear Power Plant
Post Office Box 165, MC: Zone 1
New Hill, North Carolina 27562-0165

Resident Inspector/Harris NPS
U.S. Nuclear Regulatory Commission
5421 Shearon Harris Road
New Hill, North Carolina 27562-9998

Mr. Robert P. Gruber
Executive Director
Public Staff NCUC
Post Office Box 29520
Raleigh, North Carolina 27626

Karen E. Long
Assistant Attorney General
State of North Carolina
Post Office Box 629
Raleigh, North Carolina 27602

Chairman of the North Carolina
Utilities Commission
Post Office Box 29510
Raleigh, North Carolina 27626-0510

Public Service Commission
State of South Carolina
Post Office Drawer 11649
Columbia, South Carolina 29211

T. D. Walt
Manager, Regulatory Affairs
Carolina Power & Light Company
Shearon Harris Nuclear Power Plant
P.O. Box 165, Mail Zone 1
New Hill, North Carolina 27562-0165

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta St., N.W. Suite 2900
Atlanta, Georgia 30323

Mr. Vernon Malone, Chairman
Board of County Commissioners
of Wake County
P.O. Box 550
Raleigh, North Carolina 27602

Mr. Dayne H. Brown, Director
Division of Radiation Protection
N.C. Department of Environmental
Commerce & Natural Resources
Post Office Box 27687
Raleigh, North Carolina 27611-7687

Mr. Henry Dunlap, Chairman
Board of County Commissioners
of Chatham County
P.O. Box 111
Pittsboro, North Carolina 27312

Mr. H. W. Habermeyer, Jr.
Vice President
Nuclear Services Department
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

AMENDMENT NO. 62 TO FACILITY OPERATING LICENSE NO. NPF-63 - HARRIS, UNIT 1

Docket File

PUBLIC

PDII-1 Reading

S. Varga

J. Zwolinski

OGC

G. Hill (2)

W. LeFave

C. McCracken

C. Grimes (11E22)

ACRS (4)

OPA

OC/LFMB

E. Mershoff RII

cc: Harris Service List

010073



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CAROLINA POWER & LIGHT COMPANY, et al.

DOCKET NO. 50-400

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 62
License No. NPF-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company, (the licensee), dated October 24, 1994, as supplemented July 21, 1995, 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 2.C.(2) of Facility Operating License No. NPF-63 is hereby amended to read as follows:

9508310309 950828
PDR ADOCK 05000400
P PDR

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 62, are hereby incorporated into this license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, 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: August 28, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 62

FACILITY OPERATING LICENSE NO. NPF-63

DOCKET NO. 50-400

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

Remove Pages

X
XV
3/4 7-28
3/4 7-29
B 3/4 7-5

Insert Pages

X
XV
3/4 7-28
3/4 7-29
B 3/4 7-5

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION.....	3/4 7-10
3/4.7.3 COMPONENT COOLING WATER SYSTEM.....	3/4 7-11
3/4.7.4 EMERGENCY SERVICE WATER SYSTEM.....	3/4 7-12
3/4.7.5 ULTIMATE HEAT SINK.....	3/4 7-13
3/4.7.6 CONTROL ROOM EMERGENCY FILTRATION SYSTEM.....	3/4 7-14
3/4.7.7 REACTOR AUXILIARY BUILDING (RAB) EMERGENCY EXHAUST SYSTEM.....	3/4 7-17
3/4.7.8 SNUBBERS.....	3/4 7-19
FIGURE 4.7-1 (DELETED).....	3/4 7-24
3/4.7.9 SEALED SOURCE CONTAMINATION.....	3/4 7-25
3/4.7.10 (DELETED).....	3/4 7-27
TABLE 3.7-3 (DELETED).....	3/4 7-27
TABLE 3.7-4 (DELETED).....	3/4 7-27
TABLE 3.7-5 (DELETED).....	3/4 7-27
3/4.7.11 (DELETED).....	3/4 7-27
3/4.7.12 (DELETED).....	3/4 7-28
TABLE 3.7-6 (DELETED).....	3/4 7-29
3/4.7.13 ESSENTIAL SERVICES CHILLED WATER SYSTEM.....	3/4 7-30
 <u>3/4.8 ELECTRICAL POWER SYSTEMS</u>	
3/4.8.1 A.C. SOURCES	
Operating.....	3/4 8-1
TABLE 4.8-1 (DELETED).....	3/4 8-10
Shutdown.....	3/4 8-11
3/4.8.2 D.C. SOURCES	
Operating.....	3/4 8-12
TABLE 4.8-2 BATTERY SURVEILLANCE REQUIREMENTS.....	3/4 8-14
Shutdown.....	3/4 8-15
3/4.8.3 ONSITE POWER DISTRIBUTION	
Operating.....	3/4 8-16
Shutdown.....	3/4 8-18

INDEX

BASES

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.7 PLANT SYSTEMS</u>	
3/4.7.1 TURBINE CYCLE.....	B 3/4 7-1
3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION.....	B 3/4 7-2
3/4.7.3 COMPONENT COOLING WATER SYSTEM.....	B 3/4 7-3
3/4.7.4 EMERGENCY SERVICE WATER SYSTEM.....	B 3/4 7-3
3/4.7.5 ULTIMATE HEAT SINK.....	B 3/4 7-3
3/4.7.6 CONTROL ROOM EMERGENCY FILTRATION SYSTEM.....	B 3/4 7-3
3/4.7.7 REACTOR AUXILIARY BUILDING EMERGENCY EXHAUST SYSTEM.....	B 3/4 7-3
3/4.7.8 SNUBBERS.....	B 3/4 7-4
3/4.7.9 SEALED SOURCE CONTAMINATION.....	B 3/4 7-5
3/4.7.10 (DELETED).....	B 3/4 7-6
3/4.7.11 (DELETED).....	B 3/4 7-6
3/4.7.12 (DELETED).....	B 3/4 7-6
3/4 7.13 ESSENTIAL SERVICES CHILLED WATER SYSTEM.....	B 3/4 7-6
<u>3/4.8 ELECTRICAL POWER SYSTEMS</u>	
3/4.8.1, 3/4.8.2, AND 3/4.8.3 A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION.....	B 3/4 8-1
3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES.....	B 3/4 8-3
<u>3/4.9 REFUELING OPERATIONS</u>	
3/4.9.1 BORON CONCENTRATION.....	B 3/4 9-1
3/4.9.2 INSTRUMENTATION.....	B 3/4 9-1
3/4.9.3 (DELETED).....	B 3/4 9-1
3/4.9.4 CONTAINMENT BUILDING PENETRATIONS.....	B 3/4 9-1
3/4.9.5 (DELETED).....	B 3/4 9-1
3/4.9.6 (DELETED).....	B 3/4 9-2
3/4.9.7 (DELETED).....	B 3/4 9-2
3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION.....	B 3/4 9-2
3/4.9.9 CONTAINMENT VENTILATION ISOLATION SYSTEM.....	B 3/4 9-2
3/4.9.10 and 3/4.9.11 WATER LEVEL - REACTOR VESSEL AND NEW AND SPENT FUEL POOLS.....	B 3/4 9-3
3/4.9.12 FUEL HANDLING BUILDING EMERGENCY EXHAUST SYSTEM.....	B 3/4 9-3

PLANT SYSTEMS

3/4.7.12 AREA TEMPERATURE MONITORING - DELETED

1

TABLE 3.7-6

AREA TEMPERATURE MONITORING - DELETED

1

PLANT SYSTEMS

BASES

SNUBBERS (Continued)

The service life of a snubber is established via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubbers, seal replaced, spring replaced, in high radiation area, in high temperature area, etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life.

3/4.7.9 SEALED SOURCE CONTAMINATION

The sources requiring leak tests are specified in 10 CFR 31.5(c)(2)(ii). The limitation on removable contamination is required by 10 CFR 31.5(c)5. This limitation will ensure that leakage from Byproduct, Source, and Special Nuclear Material sources will not exceed allowable intake values.

Sealed sources are classified into three groups according to their use, with Surveillance Requirements commensurate with the probability of damage to a source in that group. Those sources that are frequently handled are required to be tested more often than those that are not. Sealed sources that are continuously enclosed within a shielded mechanism (i.e., sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

3/4.7.10 DELETED

3/4.7.11 DELETED

3/4.7.12 DELETED

3.4.7.13 ESSENTIAL SERVICES CHILLED WATER SYSTEM

The OPERABILITY of the Emergency Service Chilled Water System ensures that sufficient cooling capacity is available for continued operation of safety related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 62 TO FACILITY OPERATING LICENSE NO. NPF-63

CAROLINA POWER & LIGHT COMPANY

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

DOCKET NO. 50-400

1.0 INTRODUCTION

By letter dated October 24, 1994, as supplemented July 21, 1995, Carolina Power & Light Company (the licensee or CP&L) submitted a request for changes to the Shearon Harris Nuclear Power Plant, Unit 1 (SHNPP) Technical Specifications (TS). The proposed amendment would revise the TS to allow the relocation of TS 3/4.3.3.4, Turbine Overspeed Protection; 3/4.3.7.12, Area Temperature Monitoring; and 3/4.11.2.6, Gas Storage Tanks; and the associated Bases in the TS to licensee-controlled documents. On March 22, 1995, the staff issued Amendment No. 55 allowing the relocation of TS 3/4.3.3.4 to other licensee-controlled documents.

In the July 21, 1995, supplemental letter, CP&L provides additional information regarding the relocation of TS 3/4.3.7.12, Area Temperature Monitoring, and requests the staff to approve the relocation of the change request prior to the next refueling outage. Accordingly, this Safety Evaluation contains the staff's review of the proposed changes to TS 3/4.3.7.12. The July 21, 1995, letter provides additional information to justify that the requirements for the area temperature monitoring system can be relocated to other licensee-controlled documents. The new information did not change either the scope of the October 24, 1994 letter, or the initial no significant hazards consideration determination.

2.0 BACKGROUND

Section 182a of the Atomic Energy Act (the "Act") requires that applicants for nuclear power plant operating licenses state TS and that these TS be included as a part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories including: (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. It also states that the Commission may include such additional TS as it finds to be appropriate.

9508310314 950828
PDR ADOCK 05000400
P PDR

However, the regulation does not specify the particular TS to be included in a plant's license.

The Commission has provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (Final Policy Statement), issued on July 22, 1993 (58 FR 39132), in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents, and consistent with this approach, the Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows: (1) installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of, or presents a challenge to, the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.¹ As a result, the existing Limiting Condition for Operation (LCO) requirements that fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TS, while those LCO requirements which do not fall within or satisfy these criteria may be relocated to other appropriate licensee-controlled documents.

3.0 EVALUATION

3.1 TS 3/4.3.7.12, Area Temperature Monitoring

In its submittal of October 24, 1994, the licensee proposed to relocate TS 3/4.3.7.12, the operability of the area temperature monitoring system and related surveillance requirements, to the Final Safety Analysis Report (FSAR) or other appropriate licensee-controlled documents. In the amendment application, the licensee also commits to maintain a current surveillance program for the instrumentation.

The area temperature limits for the SHNNP have been established to ensure that environmentally qualified equipment will not be exposed to temperatures beyond that to which they were originally qualified, and TS 3/4.3.7.12 places a limit on the temperature of the areas of the plant which contain safety-related

1

The Commission recently adopted amendment to 10 CFR 50.36, pursuant to which the rule was revised to codify and incorporate these criteria. See Final Rule, "Technical Specifications," (60 FR 36953, July 19, 1995). The Commission indicated that the reactor core isolation cooling, isolation condenser, residual heat removal, standby liquid control, and recirculation pump are included in the TS under Criterion 4, although it recognized that other structures, systems and components could also meet this criterion (60 FR 36956).

equipment. The TS requirements provide a means to assure that safety-related equipment will not be subjected to temperatures in excess of that assumed for the purpose of environmental qualification, and will, therefore, remain operable in order to perform their intended safety functions. The consequences of exceeding the area temperature limits are that extended exposure to elevated temperature could contribute to equipment degradation and cause the degradation to exceed the rate assumed by the facility environmental qualification (EQ) program. The operability requirements associated with the TS limiting conditions for operation of the specific safety-related equipment are as stated in the facility EQ program. This program has been previously reviewed by the staff during the SHNPP's licensing review process, and is described in Section 3.11 of the plant FSAR. The EQ program is also delineated in the plant procedure PLP-108, "Environmental Qualification Program," which is subjected to the requirements of 10 CFR 50.59. Accordingly, there is no need for a separate LCO for area temperature. The staff reviewed information provided in the July 21, 1995, supplemental letter, and concurs with the licensee that the requirements related to area temperature monitoring do not satisfy any of the final policy statement criteria which would necessitate that they be included in the TS. This instrumentation does not otherwise measure parameters that are initial condition assumptions for a design basis accident or transient, is not used to detect a significant abnormal degradation of the reactor coolant pressure boundary, and does not provide for mitigation of design basis events. Therefore, the requirements specified in these existing TS do not satisfy the criteria for TS, and have been relocated to the FSAR and will be controlled according to 10 CFR 50.59.

The NRC staff also notes that the proposed deletion of TS 3/4.3.7.12 would make the SHNPP TS consistent with the guidance provided in the NRC's Standard Technical Specifications, Westinghouse Plants (NUREG-1431) in that the NRC's Standard Technical Specifications do not include TS requiring the operability of the plant area temperature monitoring system.

4.0 SUMMARY

On the basis presented above, the staff concludes that the requirements for area temperature monitoring do not need to be controlled by TS and that changes to these requirements are adequately controlled by 10 CFR 50.59, "Changes, tests, and experiments." Should the licensee's determination conclude that an unreviewed safety question is involved, due to either (1) an increase in the probability or consequences of accidents or malfunctions of equipment important to safety, (2) the creation of a possibility for an accident or malfunction of a different type than any evaluated previously, or (3) a reduction in the margin of safety, NRC approval and a license amendment would be required prior to implementation of the change. NRC inspection and enforcement programs also enable the staff to monitor facility changes and licensee adherence to FSAR commitments and to take any remedial action that may be appropriate.

The staff has concluded, therefore, that relocation of TS 3/4.7.12 is acceptable because (1) their inclusion in TS is not specifically required by

10 CFR 50.36 or other regulations, (2) the requirements are not required to avert an immediate threat to the public health and safety, and (3) changes that are deemed to involve an unreviewed safety question will require prior NRC approval in accordance with 10 CFR 50.59(c).

The NRC staff has no objection to the deletion of the Bases associated with TS 3/4.3.7.12.

5.0 STATE CONSULTATION

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

6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding (59 FR 60379). 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: W. LeFave
N. Le

Date: August 28, 1995