August 9, 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. 61 TO FACILITY OPERATING LICENSE NO. NPF-63 REGARDING VARIOUS PORTION OF TS 3/4.9, "REFUELING OPERATIONS" TO BE CONSISTENT WITH NUREG-1431 - SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 (TAC NO. M91972)

Dear Mr. Robinson:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 61 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1. This amendment changes the Technical Specifications (TS) in response to your request dated April 5, 1995, as amended July 31, 1995.

The amendment revises various portions of TS 3/4.9, Refueling Operations, to be consistent with NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," and allows the relocation of applicable sections from the TS that do not meet the Commission screening criteria for retention.

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. 61 to NPF-63
2. Safety Evaluation

cc w/enclosures:
See next page

DOCUMENT NAME: G:\HARRIS\HAR91972.AMD

OFFICE	LA:PDII-1	PM:PDII-1	PD:PDII-1	OGC	SPLB/BC
NAME	EDunnington	NLe	JDMatthews	RBachmann	CMcCracken
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AMENDMENT NO. 61 TO FACILITY OPERATING LICENSE NO. NPF-63 - HARRIS, UNIT 1

Docket File
PUBLIC
PDII-1 Reading
S. Varga
OGC
G. Hill (2)
C. McCracken
W. Long
T. Huang
H. Garg
C. Grimes (11E22)
ACRS (4)
OPA
OC/LFMB
E. Mershoff RII

cc: Harris Service List

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

August 9, 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

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Docket No. 50-400

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2. Safety Evaluation

cc w/enclosures:
See next page

cc:

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

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

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

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

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

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

Mr. H. W. Habermeyer, Jr.
Vice President
Nuclear Services Department
Carolina Power & 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

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

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

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

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

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

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. 61
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 April 5, 1995, as amended July 31, 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:

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(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. 61 , 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 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

L RAGHAVAN

for 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 9, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 61

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	Insert Pages
xi	xi
xv	xv
1-2	1-2
3/4 9-1	3/4 9-1
3/4 9-3	3/4 9-3
3/4 9-4	3/4 9-4
3/4 9-5	3/4 9-5
3/4 9-6	3/4 9-6
3/4 9-7	3/4 9-7
3/4 9-8	3/4 9-8
3/4 9-12	3/4 9-12
B3/4 9-1	B3/4 9-1
B3/4 9-2	B3/4 9-2

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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	Motor-Operated Valves Thermal Overload Protection	3/4 8-39
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3/4.9	REFUELING OPERATIONS	
3/4.9.1	BORON CONCENTRATION	3/4 9-1
TABLE 3.9-1	ADMINISTRATIVE CONTROLS TO PREVENT DILUTION DURING REFUELING	3/4 9-2
3/4.9.2	INSTRUMENTATION	3/4 9-3
3/4.9.3	(DELETED)	3/4 9-4
3/4.9.4	CONTAINMENT BUILDING PENETRATIONS	3/4 9-5
3/4.9.5	(DELETED)	3/4 9-6
3/4.9.6	(DELETED)	3/4 9-7
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3/4.9.11	WATER LEVEL - NEW AND SPENT FUEL POOLS	3/4 9-13
3/4.9.12	FUEL HANDLING BUILDING EMERGENCY EXHAUST SYSTEM	3/4 9-14
3/4.10	SPECIAL TEST EXCEPTIONS	
3/4.10.1	SHUTDOWN MARGIN	3/4 10-1
3/4.10.2	GROUP HEIGHT, INSERTION, AND POWER DISTRIBUTION LIMITS	3/4 10-2
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BASES

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3/4.7.3	COMPONENT COOLING WATER SYSTEM	B 3/4 7-3
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3/4.7.8	SNUBBERS	B 3/4 7-4
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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
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3/4.9.2	INSTRUMENTATION	B 3/4 9-1
3/4.9.3	(DELETED)	B 3/4 9-1
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3/4.9.5	(DELETED)	B 3/4 9-1
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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
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3/4.9.12	FUEL HANDLING BUILDING EMERGENCY EXHAUST SYSTEM	B 3/4 9-3

CONTAINMENT INTEGRITY

1.7 CONTAINMENT INTEGRITY shall exist when:

a. All penetrations required to be closed during accident conditions are either:

1. Capable of being closed by an OPERABLE containment automatic isolation valve system, or

2. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Specification 3.6.3.

b. All equipment hatches are closed and sealed,

c. Each air lock is in compliance with the requirements of Specification 3.6.1.3,

d. The containment leakage rates are within the limits of Specification 3.6.1.2, and

e. The sealing mechanism associated with each penetration (e.g., welds, bellows, or O-rings) is OPERABLE.

CONTROLLED LEAKAGE

1.8 CONTROLLED LEAKAGE shall be that seal water flow supplied to the reactor coolant pump seals.

CORE ALTERATION

1.9 CORE ALTERATION shall be the movement of any fuel, sources, reactivity control components, or other components affecting reactivity within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

CORE OPERATING LIMITS REPORT

1.9.a The CORE OPERATING LIMITS REPORT is the unit-specific document that provides core operating limits for the current operating reload cycle. These cycle-specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.6. Plant operation within these core operating limits is addressed within the individual specifications.

DIGITAL CHANNEL OPERATIONAL TEST

1.10 A DIGITAL CHANNEL OPERATIONAL TEST shall consist of exercising the digital computer hardware using data base manipulation to verify OPERABILITY of alarm and/or trip functions.

3/4.9 REFUELING OPERATIONS

3/4.9.1 BORON CONCENTRATION

LIMITING CONDITION FOR OPERATION

3.9.1.a The boron concentration of all filled portions of the Reactor Coolant System, the refueling canal, and the refueling cavity shall be maintained uniform and within the limit specified in the COLR.

3.9.1.b The valves listed in Table 3.9-1 shall be in their positions required by Table 3.9-1.

APPLICABILITY: MODE 6.

ACTION:

a. With the requirements of Specification 3.9.1.a not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes, and initiate actions to restore boron concentration to within limits.

b. With the requirements of Specification 3.9.1.b not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes, and initiate action to return the valve(s) to the position required by Table 3.9-1.

SURVEILLANCE REQUIREMENTS

4.9.1.1 The boron concentration of the Reactor Coolant System, the refueling canal, and the refueling cavity shall be determined by chemical analysis to be within the limits of the COLR at least once per 72 hours.

4.9.1.2 At least once per 31 days, verify that the valves listed in Table 3.9-1 are in their positions required by Table 3.9-1.

3/4.9.2 INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.9.2 As a minimum, two Source Range Neutron Flux Monitors shall be OPERABLE, each with continuous visual indication in the control room and one with audible indication in the containment and control room.

APPLICABILITY: MODE 6.

ACTION:

a. With one of the above required monitors inoperable or not operating, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

b. With both of the above required monitors inoperable or not operating, in addition to Action a. above, immediately initiate actions to restore one source range neutron flux monitor to OPERABLE status and determine the boron concentration of the Reactor Coolant System within 4 hours and once per 12 hours thereafter.

SURVEILLANCE REQUIREMENTS

4.9.2 Each Source Range Neutron Flux Monitor shall be demonstrated OPERABLE by performance of:

a. A CHANNEL CHECK at least once per 12 hours,

b. A CHANNEL CALIBRATION once per 18 months.

3/4.9.3 DECAY TIME - DELETED

3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

LIMITING CONDITION FOR OPERATION

3.9.4 The containment building penetrations shall be in the following status:

a. The equipment door closed and held in place by a minimum of four bolts.

b. A minimum of one door in each airlock is closed, and

c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:

1. Closed by a manual or automatic isolation valve, blind flange or equivalent, or

2. Be capable of being closed by OPERABLE automatic normal containment purge and containment pre-entry purge makeup and exhaust isolation valves.

APPLICABILITY: During CORE ALTERATIONS or movement of irradiated fuel within the containment.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or movement of irradiated fuel in the containment building.

SURVEILLANCE REQUIREMENTS

4.9.4 Each of the above required containment building penetrations shall be determined to be either in its closed/isolated condition or capable of being closed by OPERABLE automatic normal containment purge and containment pre-entry purge makeup and exhaust isolation valves at least once per 7 days during CORE ALTERATIONS or movement of irradiated fuel in the containment building by:

a. Verifying the penetrations are in their closed/isolated condition, or

b. Testing the normal containment purge and containment pre-entry purge makeup and exhaust isolation valves per the applicable portions of Specification 4.6.3.2.

3/4.9.5 COMMUNICATIONS - DELETED

3/4.9.6 REFUELING MACHINE · DELETED

3/4.9.7 CRANE TRAVEL - FUEL HANDLING BUILDING - DELETED

3/4.9.10 WATER LEVEL - REACTOR VESSEL

LIMITING CONDITION FOR OPERATION

3.9.10 At least 23 feet of water shall be maintained over the top of the reactor vessel flange.

APPLICABILITY: MODE 6, during movement of irradiated fuel assemblies within containment, or during CORE ALTERATIONS, except during latching and unlatching of control rod drive shafts.

ACTION:

With the requirements of the above specification not satisfied, suspend CORE ALTERATIONS, including operations involving movement of fuel assemblies within containment, and initiate actions to restore refueling cavity water level to within limits.

SURVEILLANCE REQUIREMENTS

4.9.10 The water level shall be determined to be at least its minimum required depth once per 24 hours.

BASES

3/4.9.1 BORON CONCENTRATION

The limitations on reactivity conditions during REFUELING ensure that: (1) the reactor will remain subcritical during CORE ALTERATIONS, and (2) a uniform boron concentration is maintained for reactivity control in the water volume having direct access to the reactor vessel. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the safety analyses and are specified in the cycle-specific COLR. The boron concentration limit specified in the COLR ensures that a core K_{eff} of ≤ 0.95 is maintained during fuel handling operations. The administrative controls over the required valves during refueling operations precludes the possibility of uncontrolled boron dilution of the filled portion of the RCS. This action prevents flow to the RCS of unborated water by closing flow paths from sources of unborated water.

3/4.9.2 INSTRUMENTATION

The OPERABILITY of the Source Range Neutron Flux Monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core.

3/4.9.3 DECAY TIME - DELETED

3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

The requirements on containment building penetration closure and OPERABILITY ensure that a release of radioactive material within containment will be restricted from leakage to the environment. The OPERABILITY and closure restrictions are sufficient to restrict radioactive material release from a fuel element rupture based upon the lack of containment pressurization potential while in the REFUELING MODE.

3/4.9.5 COMMUNICATIONS - DELETED

3/4.9.6 REFUELING MACHINE - DELETED

3/4.9.7 CRANE TRAVEL - FUEL HANDLING BUILDING - DELETED

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal (RHR) loop be in operation ensures that: (1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor vessel below 140°F as required during the REFUELING MODE, and (2) sufficient coolant circulation is maintained through the core to minimize the effect of a boron dilution incident and prevent boron stratification.

The requirement to have two RHR loops OPERABLE when there is less than 23 feet of water above the reactor vessel flange ensures that a single failure of the operating RHR loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and at least 23 feet of water above the reactor pressure vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

The minimum RHR flow requirement is reduced to 900 gpm when the reactor water level is below the reactor vessel flange. The 900 gpm limit reduces the possibility of cavitation during operation of the RHR pumps and ensures sufficient mixing in the event of a MODE 6 boron dilution incident.

3/4.9.9 CONTAINMENT VENTILATION ISOLATION SYSTEM

The OPERABILITY of this system ensures that the containment purge makeup and exhaust penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 61 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 April 5, 1995, as supplemented July 31, 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 changes would (1) revise the various portions of TS 3/4.9, Refueling Operations, to be consistent with NUREG-1431, "Standard Technical Specifications (STS), Westinghouse Plants" (NUREG-1431), and (2) relocate the applicable TS 3/4.9 sections and associated Bases from the TS that do not meet the Commission screening criteria for retention. TS 3/4.9 provides operability and surveillance requirements for plant systems and activities associated with refueling the reactor vessel while in Mode 6 or with the vessel defueled, and also to ensure safe and proper storage of new and spent fuel in the Fuel Handling building. The July 31, 1995, letter provides additional information that did not change either the scope of the April 5, 1995 letter, or the initial no significant hazards consideration determination.

This amendment will allow: (1) the revision to TS 3/4.9.1 - Boron Concentration, TS 3/4.9.2 - Instrumentation, TS 3/4.9.4 - Containment Building Penetration, and TS 3/4.9.10 - Water Level, to be consistent with NUREG-1431 and will provide additional scheduling flexibility for refueling and testing activities during refueling outages; and (2) the relocation of other TS sections (TS 3/4.9.3 - Decay Time, TS 3/4.9.5 - Communications, TS 3/4.9.6 - Refueling Machine, and TS 3/4.9.7 - Crane Travel for Fuel Building Handling) to other licensee-controlled documents.

Details of the applicable staff evaluation are as follows:

2.0 EVALUATION

2.1 Revision to TS 3/4.9.1, TS 3/4.9.2, TS 3/4.9.4, and TS 3/4.9.10:

TS 3/4.9.1 - Boron Concentration

Limiting Condition for Operation (LCO) 3.9.1.a was changed by deleting the generic 2000 ppm boron and K_{eff} requirements. The corresponding wording from NUREG-1431 was adopted which requires the boron concentration to be maintained within the limit specified in the Core

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Operating Limits Report (COLR). Action Statement a, and Surveillance Requirements 4.9.1.1 and 4.9.1.2 were changed to apply the NUREG-1431 wording which utilizes the COLR's cycle specific analysis results and corresponding limits.

The staff has reviewed the changes and finds it acceptable since it is consistent with NUREG-1431 and it also meets Generic Letter No. 88-16 guidance for relocating the boron concentration limit to the COLR.

Definition 1.9 Core Alteration

The Core Alteration definition contained in NUREG-1431 was adopted. This proposed definition is a slightly different in wording from the previous one. The staff finds this change to be administrative in nature in that the proposed definition agrees with the definition in NUREG-1431.

TS 3/4.9.2 - Instrumentation

TS Section 3.9.2 LCO requires, as a minimum, two Source Range Neutron Flux Monitors operable in Mode 6. The licensee has proposed changes to the action statement 3.9.2.a and surveillance requirement 4.9.2 of this LCO is as follows:

(1) For both source range neutron flux monitors inoperable, the current TS action statement requires immediate suspension of core alteration or positive reactivity changes and determination of boron concentration at least once per 12 hours. The proposed changes add immediate restoration of one source range neutron flux monitor to operable status and determine the boron concentration of the reactor coolant system within 4 hours and once per 12 hours thereafter to the action statement. These changes are more conservative than the current TS, and are consistent with NUREG-1431, and therefore the proposed change to the action statement 3.9.2.a is acceptable.

(2) The current TS surveillance requirements require that the operability of the source range neutron flux monitors be demonstrated by performing an analog channel operational test within 8 hours prior to the initial start of core alterations and then at least once per 7 days thereafter. The proposed changes to the surveillance requirement 4.9.2 delete the operational test requirement and add performance of a channel calibration once per 18 months. The instrument calibration will include the operational test on a refueling interval basis which is less conservative than the current requirement of performance of a channel operational test at least once per 7 days. However, as discussed in item (1) above, the licensee has added more stringent requirements to the action statement for determining boron concentration (an analysis within 4 hours versus 12 hours) and to immediately restore one source range monitor to operable status in the event that both source range neutron flux monitors were inoperable. These changes are also consistent with NUREG-1431 guidance and are, therefore, acceptable.

TS 3/4.9.4 - Containment Building Penetrations

TS 3/4.9.4 would be changed to adopt wording used in NUREG-1431 relating to means of closing a containment penetration:

(1) The staff reviewed the licensee's proposed change to TS 3/4.9.4.c.1 and finds that the proposed wording is consistent with that of the STS 3.9.4.c.1 wording in NUREG-1431, which acknowledges the acceptability of equivalent isolation devices such as might be used for temporary purposes during outages to permit maintenance. The proposed change is consistent with the current staff guidance regarding acceptable isolation devices and is therefore, acceptable.

(2) The staff reviewed the licensee's proposed deletion of the words "within 100 hours prior to the start of and" from the existing TS Surveillance 4.9.4, and finds that the proposed change is consistent with the wording in NUREG-1431, in that the 100-hour limitation has been intentionally omitted from the STS. There are no special circumstances that warrant its imposition as a unique requirement for the SHNPP. It provides no additional safety benefit with respect to design basis accident mitigation during refueling operations and no significance additional assurance of containment closure. On this basis, the staff finds the proposed change acceptable.

TS 3/4.9.10 - Water Level - Reactor Vessel

(1) LCO 3.9.10 applicability and action statement, and surveillance requirement 4.9.10 were changed to reflect the wording of NUREG-1431. The staff finds the proposed changes to be consistent with NUREG-1431; and therefore are acceptable.

(2) The bases of affected specification 3/4.9.1 have been modified by the licensee to include appropriate reference to the COLR. Based on our review, the staff concludes that the changes to these bases are acceptable.

2.2 Relocation of TS 3/4.9.3, TS 3/4.9.5, TS 3/4.9.6, and TS 3/4.9.7

2.2.1 BACKGROUND

Section 182a of the Atomic Energy Act (the "Act") requires that applicants for nuclear power plant operating licenses submit 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, and it also states that the Commission may include such additional TS as it finds to be appropriate. 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.

2.2.2 EVALUATION

Details of the staff's evaluation of the licensee request for the relocation of TS 3/4.9.3 - Decay Time, TS 3/4.9.5 - Communications, TS 3/4.9.6 - Refueling Machine, and TS 3/4.9.7 - Crane Travel for Fuel Building Handling from the SHNPP TS to other licensee-controlled documents are as follows:

TS 3/4.9.3 - Decay Time

In its submittal of April 5, 1995, as supplemented July 31, 1995, the licensee proposed to relocate TS 3/4.9.3 - Decay Time, the limiting condition for operation and related surveillance requirements, to the plant FSAR or other appropriate licensee-controlled documents. The

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

decay time for the SHNNP reactor has been established to place a time limit on reactor subcriticality prior to the movement of irradiated fuel assemblies in the reactor vessel to ensure that sufficient time has elapsed for the radioactive decay of short-lived fission products.

In its July 31, 1995 supplemental letter, the licensee stated that the requirements of TS 3/4.9.3 do not meet the four Commission's Final Policy Statements screening criteria.

The staff reviewed information provided by the licensee in its July 31, 1995, supplemental letter, and concurs with the licensee justification that the requirements related to the reactor decay time during refueling operations do not satisfy any of the final policy statement criteria which would necessitate that they be included in the TS. This decay time during refueling does not otherwise effect parameters that are initial condition assumptions for a design basis accident or transient, it is not used to detect a significant abnormal degradation of the reactor coolant pressure boundary, and it does not provide for mitigation of design basis events. Therefore, the requirements specified in the existing TS 3/4.9.3 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 relocation of TS 3/4.9.3 would make the SHNPP TS consistent with the guidance provided in NUREG-1431 in that the NRC's Standard Technical Specifications do not include TS requiring the LCO for the decay time of the reactor during refueling operations. On the above basis, the staff finds the proposed change acceptable.

TS 3/4.9.5 - Communications, TS 3/4.9.6 - Refueling Machine, TS 3/4.9.7 - Crane Travel for Fuel Handling Building

In November 1987, the Westinghouse Owners Group submitted to the NRC, Topical Report WCAP-11618, "Methodically Engineered, Restructured and Improved Technical Specifications, MERITS Program - Phase II Task 5, Criteria Application." The topical report applied the Commission's screening criteria to the Westinghouse Standard Technical Specifications (NUREG-0452, Revision 4 and Draft Revision 5). The results of the NRC staff's review of WCAP-11618 was documented in a letter dated May 9, 1988 to R. A. Newton, Chairman of the Westinghouse Owners Group. Among the Specifications to which the screening criteria were applied were Standard TS Sections 3/4.9.5 - Communications, 3/4.9.6 - Refueling Machine, and 3/4.9.7, - Crane Travel, Fuel Handling Building. TS 3/4.9.5 requires communication between the SHNPP control room and the refueling station in containment, to ensure that any abnormal change in the facility status observed on the control room instrumentation can be communicated to the refueling station personnel. TS 3/4.9.6 ensures that the lifting device on the manipulator crane has adequate capacity to lift the weight of a fuel assembly and a rod control cluster assembly (RCCA), and that an automatic load limiting device is available to prevent damage to the fuel assembly during fuel movement. This specification also ensures that the auxiliary hoist on the manipulator crane has adequate capacity for latching and unlatching control rod drive shafts. TS 3/4.9.7 ensures that loads in excess of one fuel

assembly containing a RCCA, plus the weight of the fuel handling tool, will not be moved over other fuel assemblies stored in the spent fuel storage racks. In the event that the load is dropped, the activity released is limited to that contained in one fuel assembly. This specification also prevents any possible distortion of fuel assemblies in the storage racks from resulting in a critical configuration.

In its July 31, 1995 supplemental letter, the licensee stated that the requirements for TS sections 3/4.9.5, 3/4.9.6, and 3/4.9.7 do not meet the four Commission's Final Policy Statements screening criteria.

The staff reviewed information provided by the licensee in its July 31, 1995, supplemental letter, and concurs with the licensee justification that the requirements related to TS sections 3/4.9.5 - Communications, 3/4.9.6 - Refueling Machine, and 3/4.9.7, - Crane Travel for Fuel Handling Building during refueling operations do not satisfy any of the final policy statement criteria which would necessitate that they be included in the TS. These refueling specifications pertaining to communications, the refueling machine, and crane travel do not otherwise effect 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 sections 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 relocation of TS sections 3/4.9.5, 3/4.9.6, and 3/4.9.7 would make the SHNPP TS consistent with the guidance provided in NUREG-1431, in that the NRC's Standard Technical Specifications do not include TS requiring the LCO for the decay time of the reactor during refueling operations. On the above basis, the staff finds the licensee proposed changes to be acceptable.

2.2.3 SUMMARY

On the basis presented above, the staff concludes that the LCO requirements and related surveillance requirements for the reactor decay time, communications between control room and personnel at the refueling station in containment, the refueling machine and associated hoist, and load limit for the crane travel in the fuel building 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 3/4.9.3 - Decay Time, TS 3/4.9.5 - Communications, TS 3/4.9.6 - Refueling Machine, and TS 3/4.9.7 - Crane Travel for Fuel Handling Building during refueling operations are 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 3/4.9.3 - Decay Time, TS 3/4.9.5 - Communications, TS 3/4.9.6 - Refueling Machine, and TS 3/4.9.7 - Crane Travel, Fuel Building Handling from the SHNPP TS.

3.0 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.

4.0 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 changes 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 (60 FR 24906). 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.

5.0 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: H. Garg
W. Long
T. Huang
N. Le

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