



James Scarola  
Vice President  
Harris Nuclear Plant

SERIAL: HNP-01-038  
10CFR50.90

MAY - 7 2001

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  
TECHNICAL SPECIFICATION 3/4.4.3 - "PRESSURIZER"

Dear Sir or Madam:

In accordance with the Code of Federal Regulations, Title 10, Part 50.90, Carolina Power & Light Company (CP&L) requests a revision to the Technical Specifications (TS) for the Harris Nuclear Plant (HNP). The proposed amendment revises Technical Specification (TS) 3/4.4.3 and "Pressurizer - Reactor Coolant System" and the associated surveillance requirement, T/S Surveillance 4.4.3.1. Specifically, HNP proposes to revise the applicable TS to eliminate the pressurizer water volume value in the specification and change "volume" to "level" in the surveillance. Water volume for the pressurizer is not a parameter that can be monitored directly by the control room operators. The pressurizer water level value of 92%, which is also specified in the TS, is a value that is monitored by the control room operators via pressurizer level instrumentation. This change will amend the HNP TS for the pressurizer to be consistent with the corresponding TS in the Improved Technical Specifications (NUREG-1431, Standard Technical Specifications Westinghouse Plants, WOG ITS 3.4.9, "Pressurizer" and SR 3.4.9.1). Since the parameter setpoint is not being changed the limit for pressurizer water level is not impacted by this change to TS.

Enclosure 1 provides a description of the proposed changes and the basis for the changes. Enclosure 2 details, in accordance with 10 CFR 50.91(a), the basis for CP&L'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 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental assessment is required for approval of this amendment request. Enclosure 4 provides page change instructions for incorporating the proposed revisions. Enclosure 5 provides the proposed Technical Specification pages.

In accordance with 10 CFR 50.91(b), CP&L is providing the State of North Carolina with a copy of the proposed license amendment.

P.O. Box 165  
New Hill, NC 27562

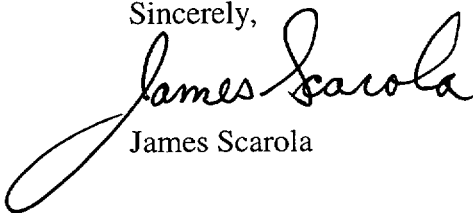
T > 919.362.2502  
F > 919.362.2095

A001

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

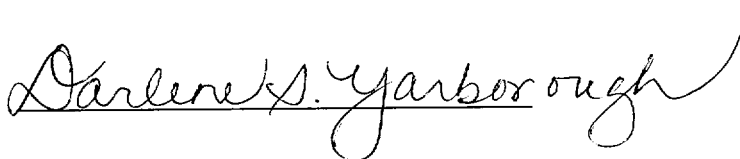
Please refer any questions regarding this submittal to Mr. E. McCartney at (919) 362-2661.

Sincerely,

  
James Scarola

RTG

James Scarola, 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 employees, contractors, and agents of Carolina Power & Light Company.

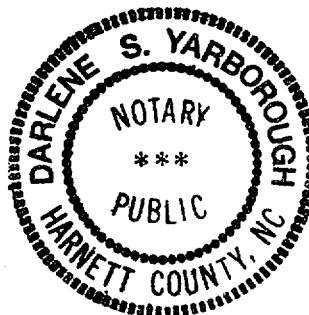


Notary (Seal)

My commission expires: 2-21-2005

Enclosures:

1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Environmental Considerations
4. Page Change Instructions
5. Technical Specification Pages



c: Mr. J. B. Brady, NRC Sr. Resident Inspector  
Mr. Mel Fry, Director, N.C. DEHNR  
Mr. R. J. Laufer, NRC Project Manager  
Mr. L. A. Reyes, NRC Regional Administrator

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TECHNICAL SPECIFICATION 3/4.4.3

BASIS FOR CHANGE REQUEST

Background

The Harris Nuclear Plant (HNP) current technical specifications provide a value for the maximum volume of water to be contained in the pressurizer as well as pressurizer level in order to assure that the pressurizer level is within the normal steady-state envelope of operation assumed in the SAR. The maximum water volume also ensures that a steam bubble is formed and thus the RCS is not a hydraulically solid system. The volume of water in the pressurizer is determined by observation of the installed pressurizer level indications. No value for volume is available for monitoring directly.

Proposed Change

Harris Nuclear Plant (HNP) proposes to modify Technical Specifications (TS) 3/4.4.3 "Pressurizer - Reactor Coolant System" and Surveillance Requirement 4.4.3.1 for monitoring pressurizer water volume. Specifically, HNP proposes to revise the applicable TS to eliminate the value specified for pressurizer water volume and replace the term "volume" with the more appropriate term "level" in the surveillance requirement for routine monitoring.

Current Technical Specification 3/4.4.3 Wording:

"The pressurizer shall be OPERABLE with a water volume of less than or equal to 1227 cubic feet, equivalent to 92% of indicated span, and at least two groups of pressurizer heaters each having a capacity of at least 125 kW."

Proposed Wording for Technical Specification 3 /4.4.3:

The pressurizer shall be OPERABLE with a water level of less than or equal to 92% of indicated span, and at least two groups of pressurizer heaters each having a capacity of at least 125 kW.

Current Technical Specification Surveillance Requirement 4.4.3.1 Wording:

"The pressurizer water volume shall be determined to be within its limit at least once per 12 hours."

Proposed Wording for Technical Specification Surveillance Requirement 4.4.3.1:

"The pressurizer water level shall be determined to be within its limit at least once per 12 hours."

Basis for proposed License Amendment:

Water volume for the pressurizer is not a parameter that can be monitored directly by the control room operators. The pressurizer water level value of 92%, which is also specified in the TS, is a value that is monitored by the control room operators via pressurizer level instrumentation. Pressurizer water volume varies directly with the temperature and pressure in the pressurizer at any given level. The volume value in the Harris Technical Specifications is a single value that does not account for variations in temperature and pressure. Pressurizer volume may be obtained via curves based on level provided for the operators in the main control room. The control parameter for the pressurizer is water level and that value is not being changed by this amendment. Since the value selected for inclusion in the HNP Technical Specifications does not necessarily correspond to the percent level due to changing pressure and temperature, it is not useful to the operation of the system and may be removed from the specification with no impact on the operation of the facility. This change will amend the HNP TS for the pressurizer to be consistent with the corresponding TS in the Improved Technical Specifications (NUREG-1431, Standard Technical Specifications Westinghouse Plants, WOG ITS 3.4.9, "Pressurizer" and SR 3.4.9.1). Since the parameter setpoint is not being changed the limit for pressurizer water level is not impacted by this change to TS.

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10 CFR 50.92 EVALUATION

The Commission has provided standards in 10 CFR 50.92(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

Harris Nuclear Plant (HNP) proposes to modify Technical Specifications (TS) 3/4.4.3 "Pressurizer - Reactor Coolant System" and Surveillance Requirement 4.4.3.1 for monitoring pressurizer water volume. Specifically, HNP proposes to revise the applicable TS to eliminate the value specified for pressurizer water volume and replace the term "volume" with the more appropriate term "level" in the surveillance requirement for routine monitoring.

Current Technical Specification 3/4.4.3 Wording:

"The pressurizer shall be OPERABLE with a water volume of less than or equal to 1227 cubic feet, equivalent to 92% of indicated span, and at least two groups of pressurizer heaters each having a capacity of at least 125 kW."

Proposed Wording for Technical Specification 3 /4.4.3:

The pressurizer shall be OPERABLE with a water level of less than or equal to 92% of indicated span, and at least two groups of pressurizer heaters each having a capacity of at least 125 kW.

Current Technical Specification Surveillance Requirement 4.4.3.1 Wording:

"The pressurizer water volume shall be determined to be within its limit at least once per 12 hours."

Proposed Wording for Technical Specification Surveillance Requirement 4.4.3.1:

"The pressurizer water level shall be determined to be within its limit at least once per 12 hours."

## Basis

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.

The proposed changes do not affect operations of the Reactor Coolant System (RCS) components. The proposed change is administrative in nature in that it deletes a value from the TS that is not used as a control limit since it cannot be monitored directly. Instead, pressurizer level is used as the control parameter and level can be monitored. The volume specified in the current TS is redundant information to the level limit in the specification. The specification is made consistent with the Improved Technical Specifications with this change. The ITS only identify a limit for percent pressurizer level. No change to the HNP TS for the pressurizer level value is being proposed.

Therefore, the proposed amendment does 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 proposed changes do not involve new plant components or procedures, but only removes a value for volume in the pressurizer which is essentially redundant to the percent level indication and not a directly monitorable parameter for plant operation. These changes are administrative in nature and do not place SSCs in conditions outside of their design basis. There is no revision to operating setpoints or conditions.

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 changes to the pressurizer level TS and associated bases only remove unnecessary information from the specification. The information is not needed for plant operation and control. The deletion of this information represents an administrative change only since no change to the maximum level setpoint or operational limit is being made. The effect of this change is to make the plant TS consistent with the current ITS with no change to the margin of safety as described in TS.

Therefore, the proposed change does not involve a reduction in the margin of safety.

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TECHNICAL SPECIFICATION 3/4.4.3

ENVIRONMENTAL CONSIDERATIONS

10 CFR 51.22(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 a significant 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 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of the amendment. The basis for this determination follows:

Proposed Change

Harris Nuclear Plant (HNP) proposes to modify Technical Specifications (TS) 3/4.4.3 "Pressurizer - Reactor Coolant System" and Surveillance Requirement 4.4.3.1 for monitoring pressurizer water volume. Specifically, HNP proposes to revise the applicable TS to eliminate the value specified for pressurizer water volume and replace the term "volume" with the more appropriate term "level" in the surveillance requirement for routine monitoring.

Current Technical Specification 3/4.4.3 Wording:

"The pressurizer shall be OPERABLE with a water volume of less than or equal to 1227 cubic feet, equivalent to 92% of indicated span, and at least two groups of pressurizer heaters each having a capacity of at least 125 kW."

Proposed Wording for Technical Specification 3 /4.4.3:

The pressurizer shall be OPERABLE with a water level of less than or equal to 92% of indicated span, and at least two groups of pressurizer heaters each having a capacity of at least 125 kW.

Current Technical Specification Surveillance Requirement 4.4.3.1 Wording:

"The pressurizer water volume shall be determined to be within its limit at least once per 12 hours."

Proposed Wording for Technical Specification Surveillance Requirement 4.4.3.1:

"The pressurizer water level shall be determined to be within its limit at least once per 12 hours."

## Basis

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

1. As demonstrated in Enclosure 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 increase in the amounts of any effluents that may be released offsite.

The proposed change is administrative in nature and does not involve any new equipment or require existing systems to perform a different type of function than they are currently designed to perform. The change does not introduce any new effluents or significantly increase the quantities of existing effluents. 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 a significant increase in individual or cumulative occupational radiation exposure.

The proposed change is administrative in nature and does not result in any physical plant changes or new surveillances that would require additional personnel entry into radiation controlled areas. Therefore, the amendment has no affect on either individual or cumulative occupational radiation exposure.



ENCLOSURE 4 TO SERIAL: HNP-01-038

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PAGE CHANGE INSTRUCTIONS

| <u>Removed Page</u> | <u>Inserted Page</u> |
|---------------------|----------------------|
| 3/4 4-10            | 3/4 4-10             |

ENCLOSURE 5 TO SERIAL: HNP-01-038

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TECHNICAL SPECIFICATION PAGES

## REACTOR COOLANT SYSTEM

### 3/4.4.3 PRESSURIZER

#### LIMITING CONDITION FOR OPERATION

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3.4.3 The pressurizer shall be OPERABLE with a water level of less than or equal to 92% of indicated span, and at least two groups of pressurizer heaters each having a capacity of at least 125 kW.

APPLICABILITY: MODES 1, 2, and 3.

#### ACTION:

- a. With only one group of pressurizer heaters OPERABLE, restore at least two groups to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With the pressurizer otherwise inoperable, be in at least HOT STANDBY with the Reactor Trip System breakers open within 6 hours and in HOT SHUTDOWN within the following 6 hours.

#### SURVEILLANCE REQUIREMENTS

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4.4.3.1 The pressurizer water level shall be determined to be within its limit at least once per 12 hours.

4.4.3.2 The capacity of each of the above required groups of pressurizer heaters shall be verified by energizing the heaters and measuring circuit power (kW) at least once per 18 months.

## REACTOR COOLANT SYSTEM

### 3/4.4.3 PRESSURIZER

#### LIMITING CONDITION FOR OPERATION

3.4.3 The pressurizer shall be OPERABLE with a water ~~volume~~ <sup>level</sup> of less than or equal to ~~1227 cubic feet, equivalent to~~ 92% of indicated span, and at least two groups of pressurizer heaters each having a capacity of at least 125 kW.

APPLICABILITY: MODES 1, 2, and 3.

#### ACTION:

- a. With only one group of pressurizer heaters OPERABLE, restore at least two groups to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With the pressurizer otherwise inoperable, be in at least HOT STANDBY with the Reactor Trip System breakers open within 6 hours and in HOT SHUTDOWN within the following 6 hours.

#### SURVEILLANCE REQUIREMENTS

4.4.3.1 The pressurizer water ~~volume~~ <sup>level</sup> shall be determined to be within its limit at least once per 12 hours.

4.4.3.2 The capacity of each of the above required groups of pressurizer heaters shall be verified by energizing the heaters and measuring circuit power (kW) at least once per 18 months.