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SUBJECT: Requests rev to TS re core operating limits of "Shutdown Margin Versus Boron."

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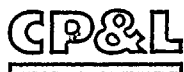
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Carolina Power & Light Company
PO Box 165
New Hill NC 27562
FEB 6 1995

William R. Robinson
Vice President
Harris Nuclear Plant

Letter Number: HO-950131

SERIAL: HNP-95-016
10 CFR 50.90

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
RELOCATION OF THE "SHUTDOWN MARGIN VERSUS BORON
CONCENTRATION" CURVE TO THE COLR

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company (CP&L) hereby requests a revision to the Technical Specifications (TS) for the Shearon Harris Nuclear Power Plant (SHNPP). This change proposes the relocation from the TS to the Core Operating Limits Report, the cycle-specific core operating limits of Figure 3.1-1 Shutdown Margin Versus Boron Concentration in Technical Specification 3.1.1.2, Shutdown Margin - Modes 3, 4 & 5.

Enclosure 1 provides a detailed 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 the Company's determination that the proposed changes do not involve a significant hazards consideration.

Enclosure 3 provides an environmental evaluation which demonstrates that the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental assessment needs to be prepared in connection with the issuance of the amendment.

Enclosure 4 provides page change instructions for incorporating the proposed revisions.

Enclosure 5 provides the proposed Technical Specification pages.

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

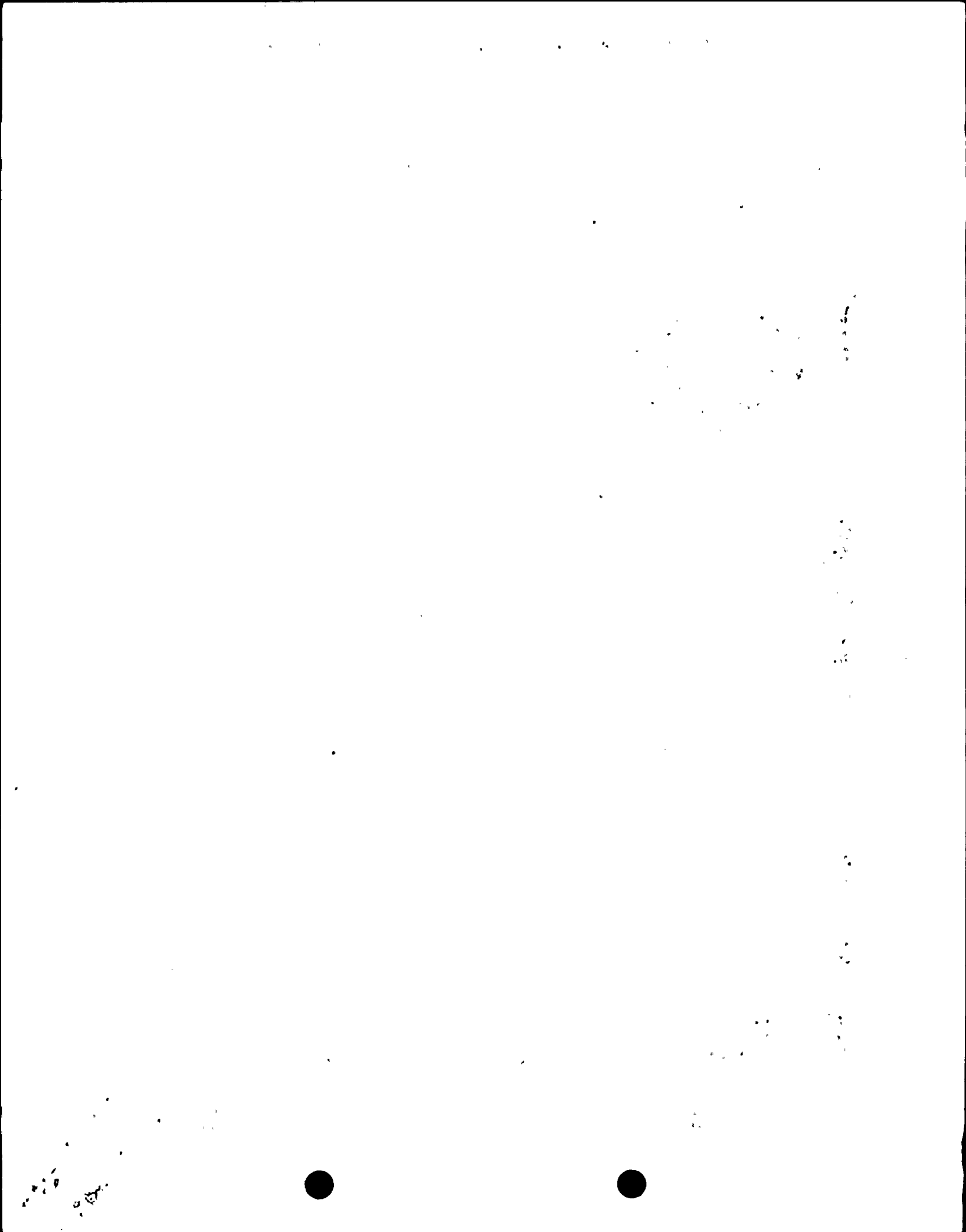
CP&L requests approval of the proposed amendment by August 1, 1995 to support preparations for the next SHNPP operating cycle. In order to allow time for

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State Road 1134 New Hill NC Tel 919 362-2502 Fax 919 362-6950

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HNP-95-016 / Page 2

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

Please refer any questions regarding this submittal to Mr. D. C. McCarthy at (919) 362-2100.

Sincerely,



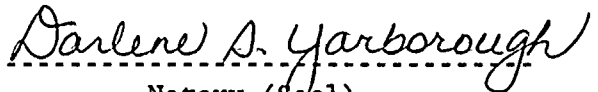
W. R. Robinson

SDC/sdc

Enclosures:

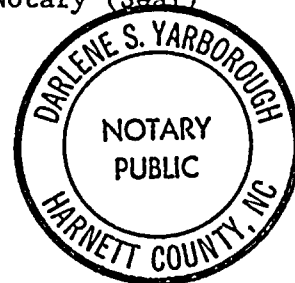
1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Environmental Considerations
4. Page Change Instructions
5. Technical Specification Pages

W. R. Robinson, 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.



Notary (Seal)

My commission expires: 2-6-2000



c: Mr. Dayne H. Brown
Mr. S. D. Ebnetter
Mr. S. A. Elrod
Mr. N. B. Le



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ENCLOSURE 1

SHEARON HARRIS NUCLEAR POWER PLANT
NRC DOCKET NO. 50-400/LICENSE NO. NPF-63
REQUEST FOR LICENSE AMENDMENT
RELOCATION OF THE "SHUTDOWN MARGIN VERSUS BORON
CONCENTRATION" CURVE TO THE COLR

BASIS FOR CHANGE REQUEST

Background

The Shearon Harris Nuclear Power Plant (SHNPP) Technical Specifications (TS) provide standards and restrictions on minimum equipment operability and on operation of the facility. The TS ensure that the plant is operated within its design basis and safety analyses. A number of specifications address limits associated with reactor physics parameters that generally change with each reload core, requiring the processing of changes to TS to update these limits each fuel cycle. NRC Generic Letter 88-16, dated October 4, 1988, was issued to encourage licensees to prepare changes to TS related to cycle-specific parameters. These TS changes would relocate cycle-specific parameter limits from the TS to the Core Operating Limits Report (COLR). The Generic Letter states that if these limits are developed using an NRC-approved methodology, the license amendment process is an unnecessary burden on the licensee and the NRC. An alternative to including the values of these cycle-specific parameters in individual specifications was provided. This alternative consisted of three separate actions to modify the plant's TS: (1) the addition of the definition of a named formal report that includes the values of cycle-specific parameter limits that have been established using an NRC-approved methodology and consistent with all applicable limits of the safety analysis, (2) the addition of an administrative reporting requirement to submit the formal report on cycle-specific parameter limits to the Commission for information, and (3) the modification of individual TS to note that cycle-specific parameters shall be maintained within the limits provided in the defined formal report.

Amendment 15 to the SHNPP Operating License established a COLR, including the requisite reporting requirements, for many SHNPP cycle-specific TS limits. The purpose of this request is to allow the relocation of an additional cycle-specific parameter to the SHNPP COLR.

Proposed Change

This change proposes the relocation, from the TS to the COLR, of the cycle-specific core operating limits of Figure 3.1-1 Shutdown Margin Versus Boron Concentration in Technical Specification 3.1.1.2, Shutdown Margin - Modes 3, 4 & 5.

Basis

Figure 3.1-1, Shutdown Margin Versus Boron Concentration, of TS 3.1.1.2 establishes limits on reactor coolant system boron concentration to ensure that the reactor can be made sub-critical, that reactivity transients associated with



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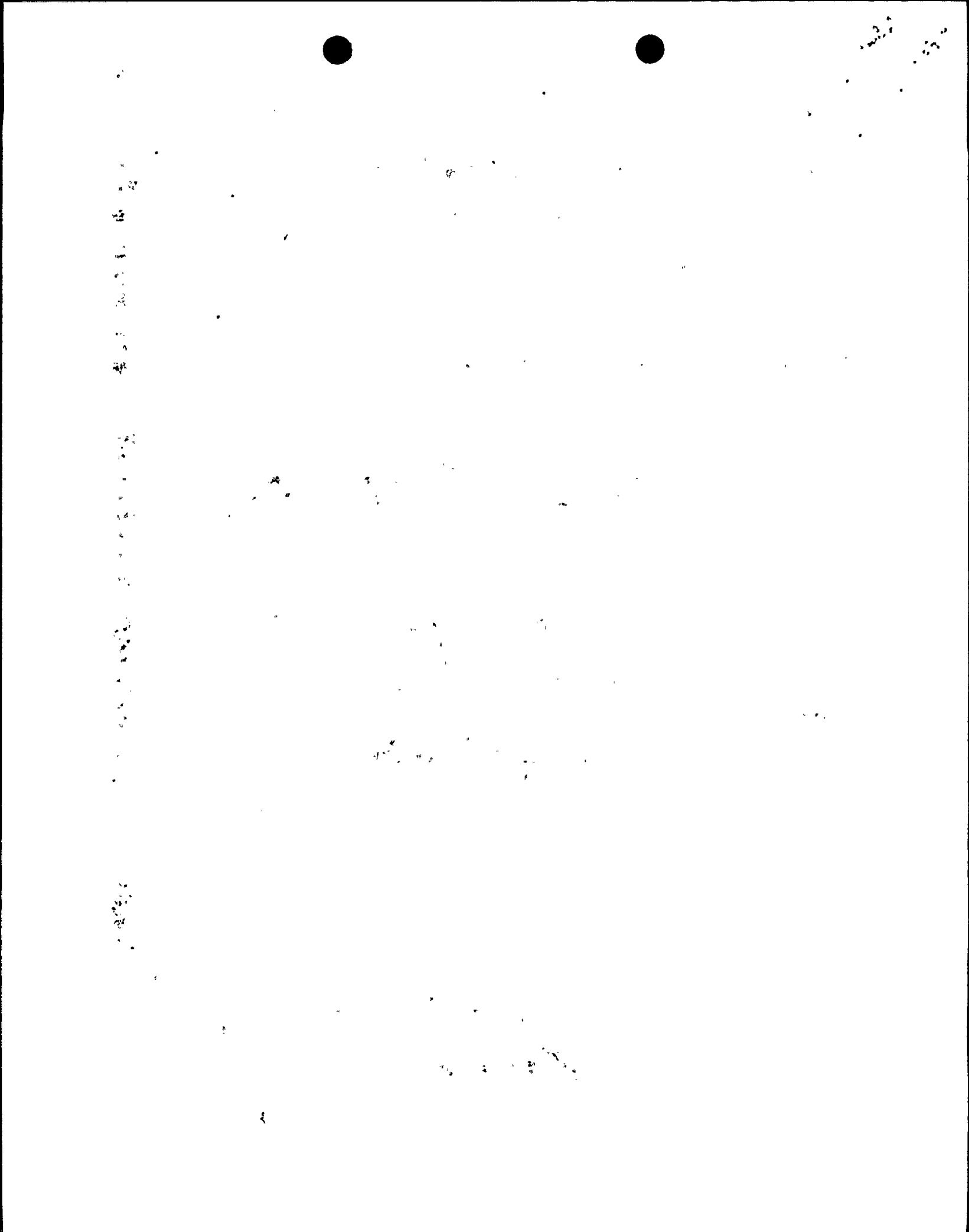
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postulated accident conditions are controllable within acceptable limits, and that the reactor will be maintained sufficiently subcritical to preclude inadvertent criticality in the shutdown condition. The limits represented in the Figure are based on the limiting boron requirements from the Steam Line Break and Boron Dilution analyses. These analyses are performed in accordance with NRC approved methodologies and the licensing basis specified in the SHNPP FSAR. The Boron Dilution analysis is cycle specific because neutronic inputs (i.e., boron worth) are a function of the fuel cycle design.

As described in Generic Letter 88-16, relocation of the cycle-specific limits eliminates the unnecessary administrative burden of processing a change request to the TS, a change that would incorporate into the TS those limits that would be revised using NRC approved methodologies. The COLR serves the same purpose without the unnecessary review burden of a TS change. With the Shutdown Margin Curve limits in the COLR, the current TS controls on how the limits are established, implemented, and revised are maintained within the structure of the TS without requiring cycle-specific amendments to review and approve cycle-specific changes. Therefore, relocation of the Shutdown Margin Curve to the COLR will have no adverse effects on the establishment or implementation of the core operating limits.

Conclusions

The relocation of cycle dependent variables from the TS to the COLR has no impact upon plant operation or safety. No safety-related equipment, safety function, or plant operation will be altered as a result of this proposed change. Since the applicable FSAR limits, i.e., the accident analysis basis, will be maintained and since the Technical Specifications will continue to require both operation within the core operational limits and the establishment of those limits by NRC-approved methodologies, this proposed change is administrative in nature.



ENCLOSURE 2

SHEARON HARRIS NUCLEAR POWER PLANT
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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

This change proposes the relocation from the Technical Specifications (TS) to the Core Operating Limits Report (COLR), the cycle-specific core operating limits of Figure 3.1-1 Shutdown Margin Versus Boron Concentration in Technical Specification 3.1.1.2, Shutdown Margin - Modes 3, 4 & 5.

Basis

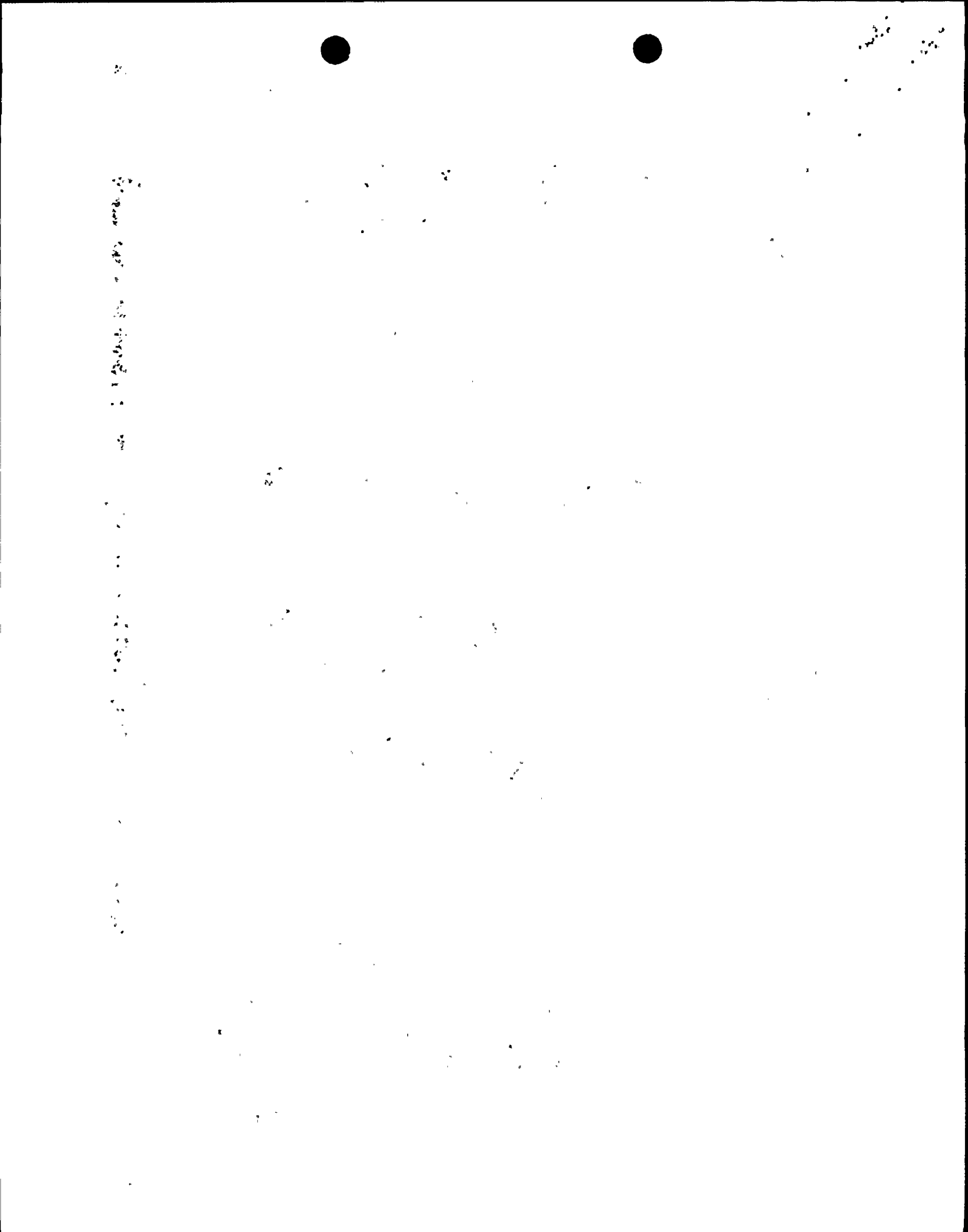
This change does not involve a significant hazards consideration for the following reasons:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change of relocating TS Figure 3.1-1, Shutdown Margin Versus Boron Concentration to the COLR has no influence or impact to the probability or consequences of an accident. The revised TS will continue to implement the shutdown margin limits through reference to the Shutdown Margin Curve in the COLR. In addition, the COLR is subject to the existing controls of TS 6.9.1.6. Given that this change is an administrative relocation of the Shutdown Margin Curve to another TS controlled document, there would be no increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

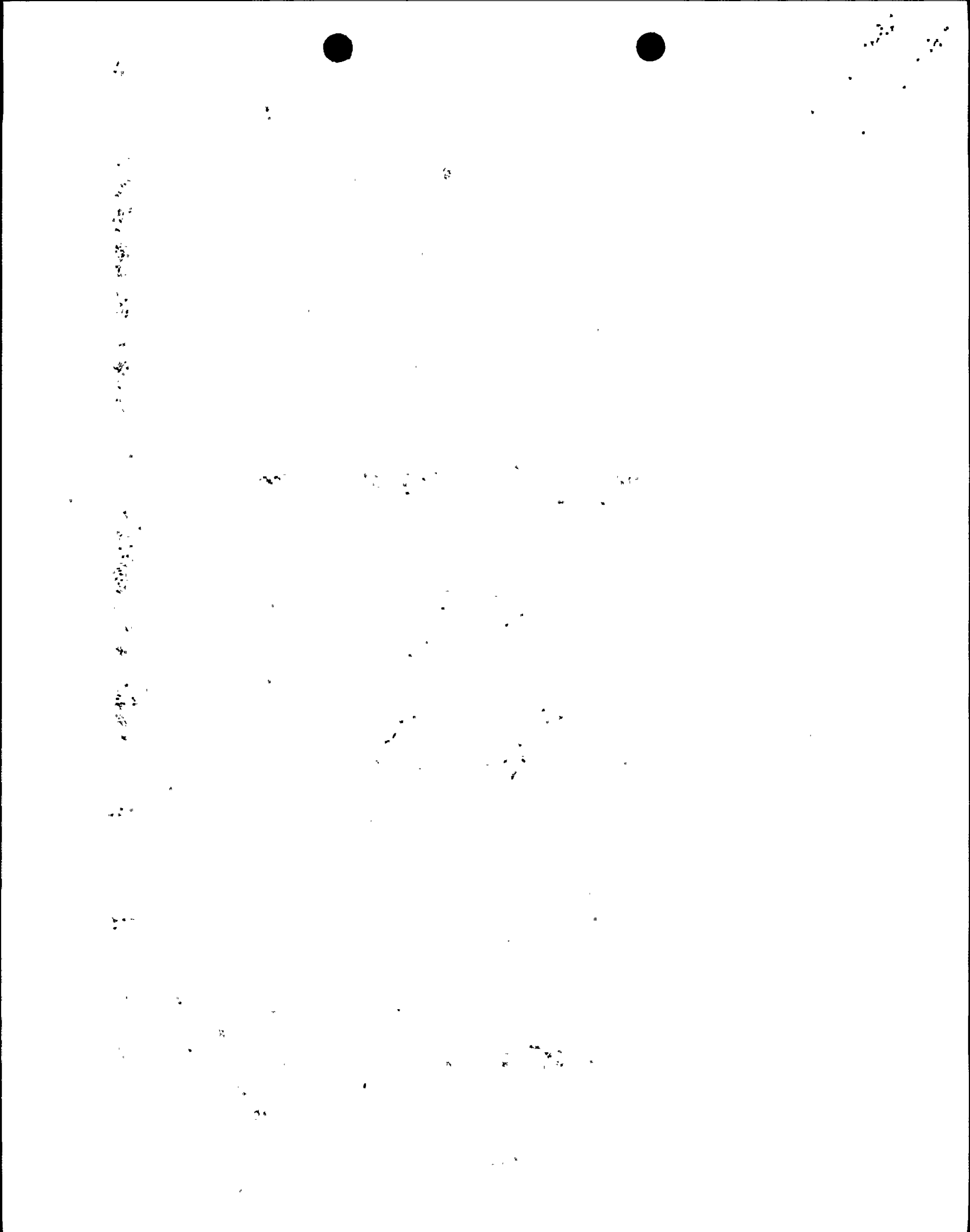
No safety-related equipment, safety function, or plant operation will be altered as a result of this proposed change. The TS will continue to



require operation within the required core operating limits. Therefore, the proposed changes do 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.

Relocation of the Shutdown Margin Curve to the TS controlled COLR has no effect on the core operating limits currently in force in TS 3.1.1.2. Future revisions to the Shutdown Margin Curve are governed by TS 6.9.1.6 which stipulates the specific TS that reference the COLR limits and the methodologies utilized in developing those limits. Given that this change is an administrative relocation of the Shutdown Margin Curve to another TS controlled document, the proposed changes do not involve a significant reduction in a margin of safety.



ENCLOSURE 3

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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

This change proposes the relocation from the Technical Specifications to the Core Operating Limits Report, the cycle-specific core operating limits of Figure 3.1-1 Shutdown Margin Versus Boron Concentration in Technical Specification 3.1.1.2, Shutdown Margin - Modes 3, 4 & 5.

Basis

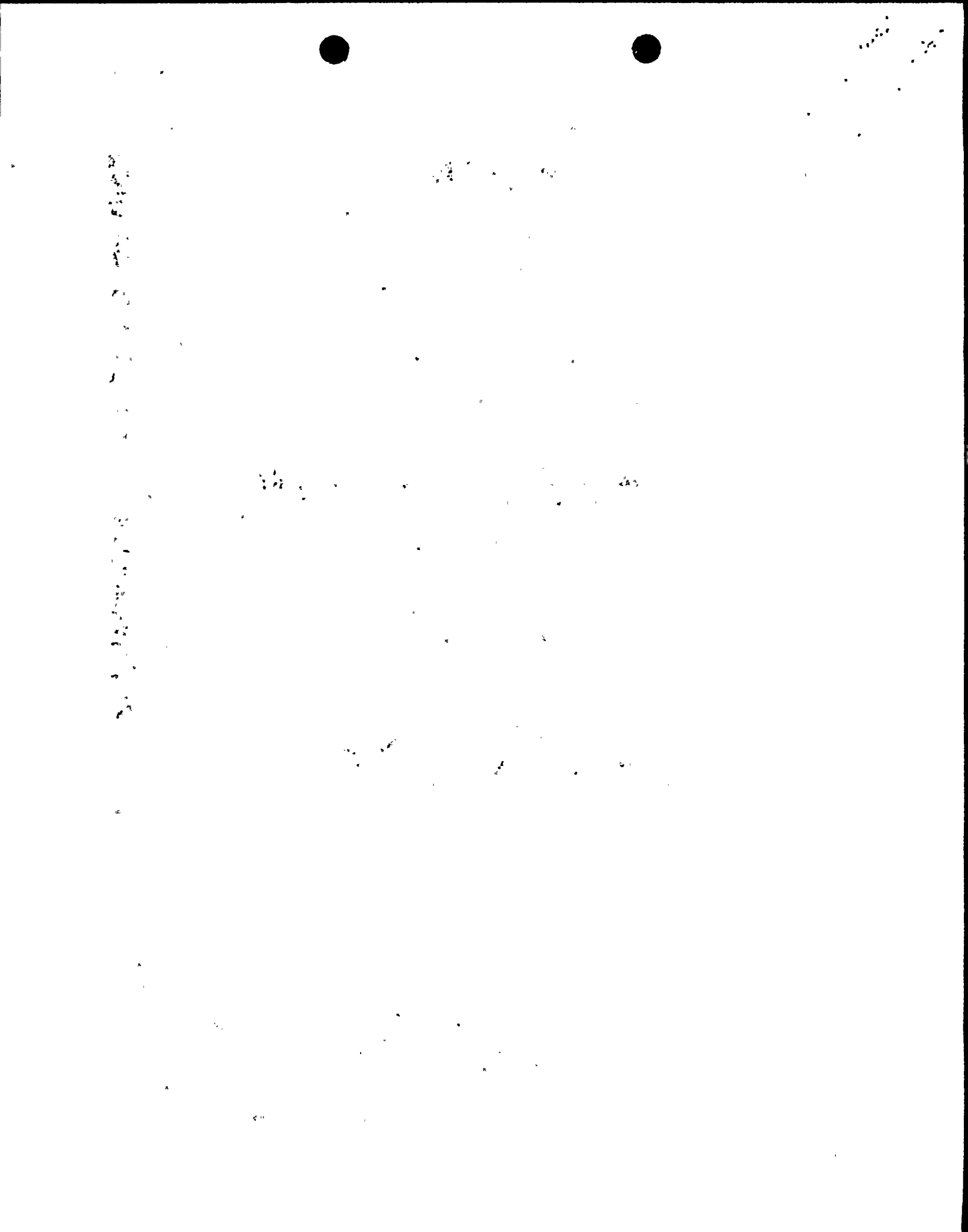
The change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) for the following reasons:

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 significant increase in the amounts of any effluents that may be released offsite.

The proposed change relocates numerical values for cycle-specific core operating limits from the Technical Specifications to the existing Core Operating Limits Report (COLR). The proposed amendment does not introduce any new equipment nor does it require any existing equipment or systems to perform a different type of function than they are currently designed to perform. As such, the change can not 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 relocates numerical values for cycle-specific core operating limits from the Technical Specifications to the existing Core Operating Limits Report. No additional surveillances or testing results from the amendment. Therefore, the amendment has no affect on either individual or cumulative occupational radiation exposure.



ENCLOSURE 4
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PAGE CHANGE INSTRUCTIONS

<u>Removed Page</u>	<u>Inserted Page</u>
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3/4 1-3	3/4 1-3
3/4 1-3a	3/4 1-3a
3/4 1-8	3/4 1-8
3/4 1-10	3/4 1-10
3/4 1-12	3/4 1-12
6-24	6-24
6-24b	6-24b
B 3/4 1-1	B 3/4 1-1

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ENCLOSURE 5
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TECHNICAL SPECIFICATION PAGES