CP&L

Carolina Power & Light Company
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April 8, 1996

SERIAL: BSEP 96-0061
10 CFR 50.90
TSC 95TSB32

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 1
DOCKET NO. 50-325/LICENSE NO. DPR-71
REQUEST FOR LICENSE AMENDMENT
FUEL CYCLE 11 RELOAD LICENSING

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company hereby requests a revision to the Technical Specifications for the Brunswick Steam Electric Plant (BSEP), Unit No. 1. This proposed amendment revises the following:

1. The Minimum Critical Power Ratio (MCPR) Safety Limit specified in Technical Specification 2.1.2 from 1.07 to 1.09 for Unit 1 Cycle 11 operation.

2. Technical Specification 5.3.1 to reflect the new fuel type (GE13) that will be inserted during Unit 1 Refueling Outage 10.

3. The acceptable range of sodium pentaborate concentration for the standby liquid control system shown in Technical Specification Figure 3.1.5-1 to reflect changes to poison material concentration needed to achieve reactor shutdown based on the new GE13 fuel type.

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

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

Enclosure 3 provides an environmental evaluation which demonstrates that the proposed amendments meet the eligibility 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.

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

Enclosure 5 provides the marked-up Technical Specification pages for Unit 1.

Enclosure 6 provides the typed Technical Specification pages for Unit 1.

Carolina Power & Light Company is providing, in accordance with 10 CFR 50.91(b), Mr. Dayne H. Brown of the State of North Carolina with a copy of the proposed license amendment.

Through a separate letter, CP&L is submitting proposed license amenoments to revise the BSEP Technical Specifications to allow uprate of the units to 105 percent of rated thermal power. The License Topical Report supporting the power uprate amendment requests was submitted by letter dated November 20, 1995 (BSEP 95-0535). By letters dated June 1, 1989 and January 10, 1991, CP&L has previously received NRC approval to use the SAFER/GESTR-LOCA methodology as the plant licensing basis. The GE13 fuel type has been analyzed using the design inputs that are contained in the approved SAFER/GESTR-LOCA analysis, which provides the basis for the proposed 105 percent power uprate. Carolina Power & Light Company plans to implement power uprate during the Fall 1996 Unit 1 refueling outage (B111R1).

On April 4, 1996, CP&L learned that General Electric has recently identified an issue relating to their methodology for calculating the generic GE11 fuel type safety limit minimum critical power ratio (MCPR). As a result, General Electric has initiated action to review the adequacy of the generic safety limit minimum critical power ratios for all plants operating with GE fuel. At present, General Electric has not identified an issue relating to the GE13 generic safety limit MCPR. If General Electric identifies the need to revise the generic safety limit MCPR for the GE13 fuel type, CP&L will submit a supplement to this license amendment request to address any necessary changes.

The proposed license amendment cannot be issued and made effective until the end of the current Unit 1 operating cycle (Cycle 10) because of the impact of these proposed changes on operating thermal-hydraulic limits for the existing fuel types in use. Based on the planned outage schedule, CP&L requests issuance of the proposed amendment by October 5, 1996 (start date for the refueling outage). In order to allow time for procedure revision, orderly incorporation into copies of the Technical Specifications, and support of the outage schedule, CP&L requests that the proposed amendment, once approved by the NRC, be effective as of October 5, 1996 and be implemented prior to the start-up of Unit 1 from Refueling Outage 10 (B111R1).

Please refer any questions regarding this submittal to Mr. George Honma at (910) 457-2741.

Sincerely,

William Levis
Director — Site Operations
Brunswick Nuclear Plant

WRM/wrm

Enclosures:

1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Environmental Considerations
4. Page Change Instructions
5. Marked-up Technical Specification Pages - Unit 1
6. Typed Technical Specification Pages - Unit 1

William Levis, 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, and agents of Carolina Power & Light Company.

Gwendolyn R. Midyette
Notary (Seal)

My commission expires: August 12, 1996

pc:

Mr. Charles A. Patterson
Brunswick NRC Senior Resident Inspector

U. S. Nuclear Regulatory Commission
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Mr. Dayne H. Brown
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Raleigh, NC 27611-7687

The Honorable H. Wells
Chairman - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
NRC DOCKET NO. 50-325
OPERATING LICENSE NO. DPR-71
REQUEST FOR LICENSE AMENDMENT
FUEL CYCLE 11 RELOAD LICENSING

BASIS FOR CHANGES

PROPOSED CHANGE 1:

Current Requirement

Technical Specification 5.3.1 states:

> The reactor core shall contain 560 fuel assemblies limited to the following fuel types: BP8x8R, GE8x8EB, and GE8x8NB-3.

Technical Specification 2.1.2 states:

> The MINIMUM CRITICAL POWER RATIO (MCPR) shall not be less than 1.07 with the reactor vessel steam dome pressure greater than 800 psia and core flow greater than 10% of rated flow.

Proposed Change

Incorporate the GE13 fuel type into Technical Specification 5.3.1 and, as a result, revise the safety limit minimum critical power ratio (MCPR) specified in Technical Specification 2.1.2 from 1.07 to 1.09.

Basis For Proposed Change

The fuel types that have been reviewed and approved by the Nuclear Regulatory Commission (NRC) staff for use in Brunswick Unit 1 reactor cores are listed in Technical Specification 5.3.1. At present, the BP8x8R, GE8x8EB, and GE8x8NB-3 fuel types have been approved by the NRC. For Unit 1 Cycle 11 operation, Carolina Power & Light Company (CP&L) plans to use the GE13 fuel type as reload fuel; therefore, revisions to Technical Specifications 5.3.1 and 2.1.2 are being proposed to reflect the planned use of this new fuel design.

General Electric Nuclear Energy (GE) document NEDE-24011-P-A, "General Electric Standard Application For Reactor Fuel (GESTAR-II)," through the latest NRC-approved amendment, provides the latest acceptance criteria for new GE fuel designs (Reference 1). The GE13 fuel

type design fully complies with the acceptance criteria contained in the previously approved Amendment 22 of NEDE-24011-P-A. The GE13 design is similar to the GE11 fuel design, which has been previously reviewed and accepted by the NRC and is in use at numerous U.S. reactors. The major difference between the GE11 and GE13 designs is the GE13 fuel assembly has eight spacers with the part length rods terminating above the sixth spacer, whereas the GE11 fuel assembly has seven spacers with the part length rods terminating just above the fifth spacer. As a result, the part length rods in the GE13 fuel assembly are slightly longer than the part length rods in the GE11 assembly. Adding an extra spacer in the upper region of the fuel assembly results in an increased critical power capability for identical thermal-hydraulic conditions. Based on the similarity of the GE11 and GE13 fuel designs, by letter from J. F. Klapproth (GE) to the NRC Document Control Desk dated December 30, 1993 (Reference 2), General Electric has informed the NRC that the GE13 fuel type is considered equivalent to a formally NRC licensed design.

The use of the GE13 fuel design beginning with the next Unit 1 operating cycle (Cycle 11) requires the revision of the safety limit minimum critical power ratio (MCPR). The new safety limit minimum critical power ratio value of 1.09 has been based on an approved methodology that complies with Amendment 22 of General Electric Nuclear Energy (GE) document NEDE-24011-P-A (GESTAR-II). General Electric has requested NRC approval of a generic GE13 safety limit minimum critical power ratio to facilitate individual licensee implementation of GE13 fuel. The safety limit minimum critical power ratio is established to protect the integrity of the fuel cladding during normal operation and anticipated transients, as required by Criterion 10 of 10 CFR Part 50, Appendix A. As such, the safety limit minimum critical power ratio bounds the acceptable consequences of anticipated operational transients (i.e., the safety limit minimum critical power ratio is defined to assure that 99.9 percent of the fuel rods avoid boiling transition during normal operation and anticipated operational transients, when all uncertainties are considered).

General Electric has determined that the GE13 fuel bundles provide a significantly flatter power distribution than the similarly designed limiting GE11 bundle with a corresponding impact on the safety limit minimum critical power ratio value (1.07 for GE11 versus 1.09 for GE13 based on analyses using verified inputs). Because of this uniformity in critical power capability, when the most limiting fuel rod in a bundle experiences boiling transition, the margin to boiling transition of the remaining rods is reduced. Therefore, to assure that 99.9 percent of the fuel rods avoid boiling transition during a transient event when all uncertainties are considered, the calculated margin of the most limiting fuel rod must be increased (resulting in the safety limit MCPR being revised from 1.07 to 1.09). Thus, the new safety limit minimum critical power ratio value of 1.09 maintains the same degree of conservatism as that for the previous safety limit minimum critical power ratio. For the currently approved fuel types that will be carried over to the upcoming Unit 1 Cycle 11 reactor core, the proposed revision of the safety limit minimum critical power ratio is conservative.

While in the reactor core, fuel bundles interact with the control blades. Spacers on the channeled bundles maintain an acceptable spacing between bundles to allow control blade movement. Buttons or rollers on the blades are guided by the channels. The new GE13 fuel bundles (channeled) have the same outer dimensions as the current GE10 fuel bundles (e.g., GE8x8NB-3), and provide an equivalent response with regard to control blade movement and interaction.

The radiological consequences of a fuel handling accident involving the new GE13 fuel type were evaluated. The GE13 fuel type will be operated to a higher burn-up than the current fuel types. Although the Technical Specifications do not contain a limit for maximum fuel burn-up, the Nuclear Regulatory Commission has established a 60,000 MWD/MT burn-up limit on the peak rod (Reference 3). This extended burn-up evaluation was performed for the original 7x7 fuel type, which bounds the later 8x8 fuel types. General Electric has demonstrated the radiological consequences of a fuel handling accident with the new GE13 fuel type (a 9x9 fuel type) will be less than a similar accident involving the original 7x7 fuel type (Reference 4). Thus, the consequences of extended burn-up of the GE13 fuel type are bounded by current analyses.

Additional Information:

Similar changes for incorporating the GE13 fuel type into the Technical Specifications for the Brunswick Plant, Unit 2 were requested by letter dated August 4, 1995 (Reference 5) and subsequently approved as License Amendment No. 212 (Reference 6). Through a separate letter, CP&L is submitting proposed license amendments to revise the BSEP Technical Specifications to allow uprate of the units to 105 percent of rated thermal power. The License Topical Report supporting the power uprate amendment requests was submitted by letter dated November 20, 1995 (BSEP 95-0535). By letters dated June 1, 1989 and January 10, 1991, CP&L has previously received NRC approval to use the SAFER/GESTR-LOCA methodology as the plant licensing basis. The GE13 fuel type has been analyzed using design inputs that are contained in the approved SAFER/GESTR-LOCA analysis, which provides the basis for the proposed 105 percent power uprate. Carolina Power & Light Company plans to implement power uprate during the Fall 1996 Unit 1 refueling outage (B111R1)

PROPOSED CHANGE 2:

Current Requirement

Technical Specification 3.1.5 states:

> The standby liquid control system shall be OPERABLE with:
>
> a. An OPERABLE flow path from the storage tank to the reactor core, containing two pumps and two in line explosive injection valves,
>
> b. The contained solution volume-concentration within the limits of Figure 3.1.5-1, and
>
> c. The solution temperature above the limit of Figure 3.1.5-2.

Proposed Change

Revise the acceptable sodium pentaborate volume-concentration range for the standby liquid control system shown in Technical Specification Figure 3.1.5-1 to reflect changes to poison

material concentration needed to achieve reactor shutdown based on planned use of the new GE13 fuel type.

Basis For Proposed Change

The purpose of the standby liquid control system (SLCS) is to inject a neutron absorbing solution into the reactor in the event that a sufficient number of control rods cannot be manually inserted to maintain subcriticality. Sufficient solution is to be injected such that the reactor will be brought from maximum rated power conditions to subcritical over the entire reactor temperature range from maximum operating to cold shutdown conditions. An additional operating requirement for the SLCS is to inject sodium pentaborate to control, mitigate and terminate certain transients with a concurrent failure of the reactor to scram, or anticipated transients without scram events.

The Technical Specifications do not identify a specific value for required SLCS shutdown margin beyond the necessary shutdown reactivity. However, GE methodology establishes a fuel type dependent SLCS shutdown margin which includes consideration of calculational uncertainties. For the currently approved fuel types, a minimum shutdown margin of 2.6%Δk is required in the SLCS analysis. For the GE13 fuel type, GE methodology requires greater than 3.2%Δk of shutdown margin. The current minimum SLCS tank concentration of 13 percent by weight will provide an in-vessel concentration of at least 600 ppm, which supports the existing design requirement for 2.6%Δk of shutdown margin. GE calculations show that an in-vessel concentration of 660 ppm will provide adequate additional shutdown margin to support the GE13 fuel type. In order to achieve the in-vessel concentration of 660 ppm, the SLCS sodium pentaborate volume-concentrations applicable for the lower range of tank volumes is being revised to ensure sufficient neutron absorber is injected to achieve reactor subcriticality. The minimum concentration of 13.0 percent is being retained for the new range. The effect of this change on the existing SLCS sodium pentaborate volume-concentration shown in Technical Specification Figure 3.1.5-1 is shown on the attached Exhibit A. The portion of the engineering analysis that contains the calculations used to develop the revised SLCS sodium pentaborate volume-concentration figure are documented in CP&L Calculation 0SLC-0001.

During normal operations, the standby liquid control system tank concentration is maintained in a range from approximately 16 percent to 17 percent to provide sufficient margin to avoid the occurrence of a dilution/precipitation event. If the minimum concentration at the tank low level alarm (3,220 gallons) is raised from 13.4 percent to 14.8 percent, the tank concentration for normal operation would need to be maintained above this range to provide margin between the working concentration and the Technical Specification limit.

The proposed SLCS tank volume-concentration range falls within the current acceptable range specified by Technical Specification Figure 3.1.5-1. The change in volume-concentration range, for one or two pump operation, would still result in SLCS injection times within the ranges stated in the Updated FSAR. Also, increasing the minimum sodium pentaborate volume-concentration does not require a change to the SLCS minimum pump flow rates (for one pump operation, as stated in Technical Specification 4.1.5.c.2).

References:

1. General Electric Nuclear Energy Document NEDE-24011-P-A-11, "General Electric Standard Application for Reactor Fuel (GESTAR-II)," November 1995.

2. Letter from J. Klapproth (General Electric) to the U.S. Nuclear Regulatory Commission dated December 30, 1993, "Completion of GE13 Licensing Qualification."

3. U.S. Nuclear Regulatory Commission letter dated February 6, 1988, Issuance of Amendment No. 124 to Facility Operating License No. DPR-62, Brunswick Steam Electric Plant, Unit 2 Regarding Fuel Cycle No. 8 - Reload Extended Burnup Fuel (TAC No. 69200).

4. General Electric Nuclear Energy Document NEDE-32198P, "GE13 Compliance With Amendment 22 of NEDE-24011-P-A (GESTAR II)," December 1993.

5. Letter from Roy A. Anderson (CP&L) to NRC Document Control Desk dated August 4, 1995, "Request for License Amendment Fuel Cycle 12 Reload Licensing."

6. U.S. Nuclear Regulatory Commission letter dated January 31, 1996, "Issuance of Amendment No. 212 To Facility Operating License No. DPR-62 Regarding Fuel Cycle No. 12 — Brunswick Steam Electric Plant, Unit 2 (BSEP 95-0299) (TAC No. M93258)."

7. U.S. Nuclear Regulatory Commission letter dated June 1, 1989, "SAFER/GESTR-LOCA Analysis - Brunswck Steam electric Plant, Units 1 and 2 (TAC Nos. 72854 and 72855)."

8. U.S. Nuclear Regulatory Commission letter dated January 10, 1991, "Revision of SAFER/GESTR-LOCA Analysis - Brunswck Steam electric Plant, Units 1 and 2 (TAC Nos. 77585 and 77586)."

EXHIBIT A

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
NRC DOCKET NO. 50-325
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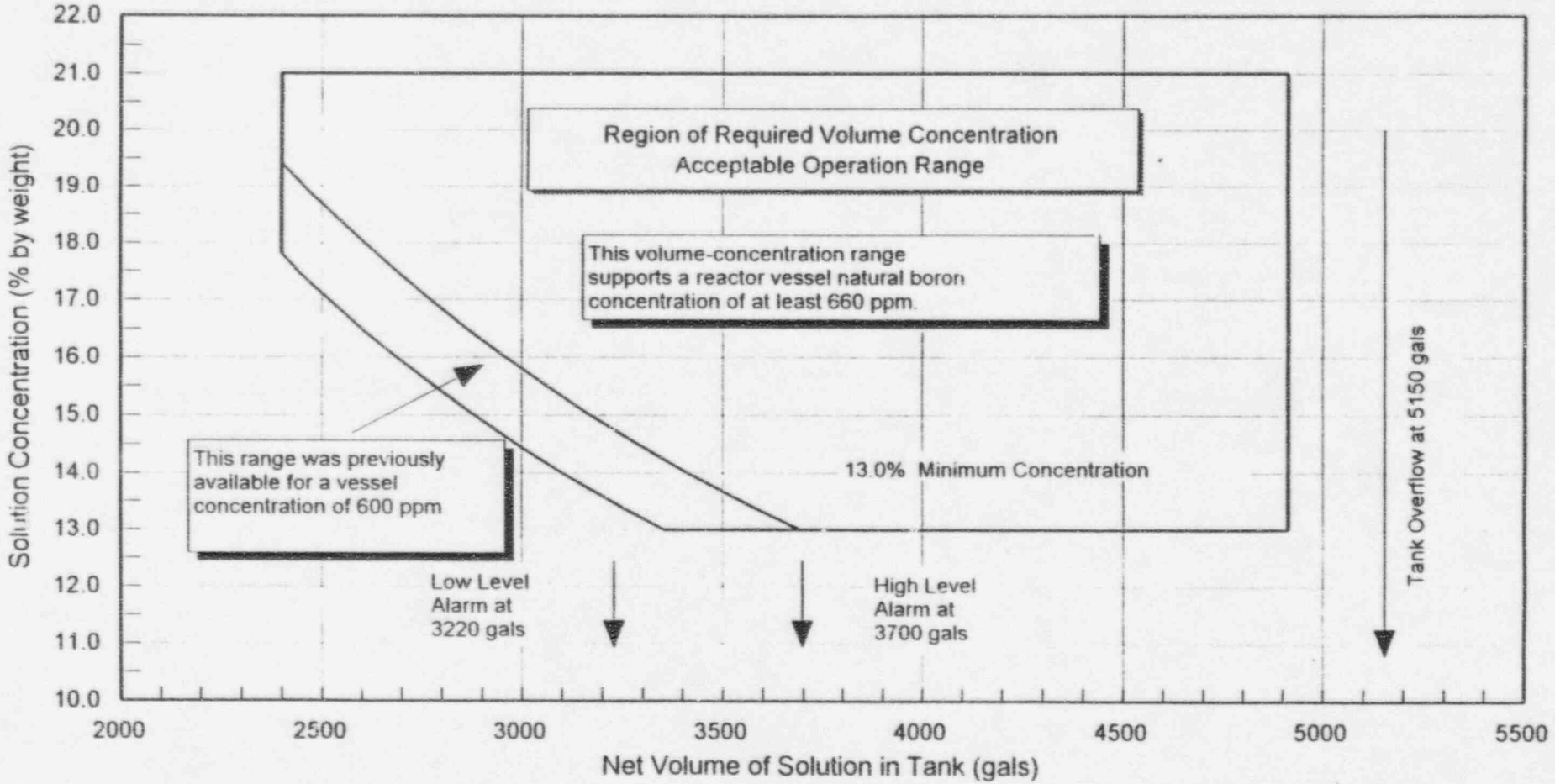
REQUEST FOR LICENSE AMENDMENT
FUEL CYCLE 11 RELOAD LICENSING

SODIUM PENTABORATE SOLUTION
VOLUME CONCENTRATION RANGE COMPARISON

06/29/95

SODIUM PENTABORATE SOLUTION VOLUME CONCENTRATION RANGE COMPARISON



ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
NRC DOCKET NO. 50-325
OPERATING LICENSE NO. DPR-71
REQUEST FOR LICENSE AMENDMENT
FUEL CYCLE 11 RELOAD LICENSING

10 CFR 50.92 EVALUATION

The Commission has provided standards in 10 CFR 50.92 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 believes that its adoption would not involve a significant hazards consideration. The basis for this determination follows.

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

   Proposed Change 1:

   The proposed amendment will allow the loading and use of GE13 fuel assemblies in the Brunswick Unit 1 reactor core. The use of GE13 fuel assemblies requires that the safety limit minimum critical power ratio value also be revised. The safety limit minimum critical power ratio is established to maintain fuel cladding integrity during operational transients. The GE13 fuel assembly design has been analyzed using methods that have been previously approved by the Nuclear Regulatory Commission and documented in General Electric Nuclear Energy's reload licensing methodology Topical Report (NEDE-24011-P-A-11, "General Electric Standard Application for Reactor Fuel (GESTAR II)" dated November 1995).

   The proposed revision of the safety limit minimum critical power ratio does not alter any plant safety related equipment, safety function, or plant operations that could change the probability of an accident. The change does not affect the design, materials, or construction standards applicable to the fuel bundles in a manner that could change the probability of an accident.

   A methodology that has been previously reviewed and accepted by the Nuclear Regulatory Commission was used to derive both the existing and updated safety limit minimum critical power ratio value. The same methodology and criteria have been applied to derive the existing safety limit minimum critical power ratio of 1.07 as that used to derive the updated safety limit minimum critical power ratio value of 1.09. The updated safety limit minimum critical power ratio assures that fuel cladding protection equivalent to that provided with the existing safety limit minimum critical power ratio value is maintained. This ensures that the consequences of previously evaluated accidents are not significantly increased.

Proposed Change 2:

The standby liquid control system provides a means of reactivity control that is independent of the normal reactivity control system. The standby liquid control system must be capable of assuring that the reactor core can be placed in a subcritical condition at any time during reactor core life. Technical Specification Figure 3.1.5-1 specifies the acceptable range of concentrations and volumes for sodium pentaborate solution used as a neutron absorber (i.e., for reactivity control). The portion of the sodium pentaborate concentration range shown in Technical Specification Figure 3.1.5-1 applicable to the lower range of tank volumes is being revised to increase the required concentration of sodium pentaborate solution. This change is needed to account for the additional shutdown reactivity needed based on the planned use of GE13 fuel assemblies as reload fuel for the Unit 1 reactor core. Since the standby liquid control system is independent from the normal means of controlling reactor core reactivity and not used to control core reactivity during normal plant operations, the proposed revision to the sodium pentaborate concentration curve for the standby liquid control system does not alter any plant safety-related equipment, safety function, or plant operations that could change the probability of an accident.

The current volume-concentration range of sodium pentaborate used in the standby liquid control system will achieve a sufficient concentration of boron in the reactor vessel to ensure reactor shutdown. Based on the increased reactivity of the new GE13 reload fuel assemblies, the required sodium pentaborate volume-concentration range is being revised to ensure sufficient neutron absorbing solution is available to achieve reactor shutdown; therefore, the consequences of an accident previously evaluated are not significantly increased.

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

Proposed Change 1:

The GE13 fuel assembly has been designed and complies with the acceptance criteria contained in General Electric Nuclear Energy's standard application for reactor fuel (GESTAR-II), which provides the latest acceptance criteria for new General Electric fuel designs. The GE13 fuel assembly complies with GESTAR-II acceptance criteria that have been previously reviewed and accepted by the Nuclear Regulatory Commission. The similarity of the GE13 fuel design to the previously accepted GE11 fuel design, in conjunction with the increased critical power capability of the GE13 fuel design, ensure that no new mode or condition of plant operation is being authorized by the loading and use of the GE13 fuel type. The proposed revision of the safety limit minimum critical power ratio from 1.07 to 1.09 does not modify any plant controls or equipment that will change the plant's responses to any accident or transient as given in any current analysis. Therefore, the proposed change to allow the loading and use of the GE13 fuel type and the revision of the safety limit minimum critical power ratio value from 1.07 to 1.09 will not create the possibility for a new or different kind of accident from any accident previously evaluated.

Proposed Change 2:

As discussed above, the standby liquid control system provides a means of reactivity control that is independent of the normal reactivity control system and is capable of assuring that the reactor core can be placed in a subcritical condition at any time during reactor core life. The proposed revision to the sodium pentaborate concentration range does not modify the standby liquid control system or its controls, does not modify other plant systems and equipment, and does not permit a new or different mode of plant operation. As such, the proposed revision to the minimum pentaborate concentration value does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed license amendment does not involve a significant reduction in a margin of safety.

Proposed Change 1:

As previously discussed, the GE13 fuel assembly design has been analyzed using methods that have been previously approved by the Nuclear Regulatory Commission and documented in General Electric Nuclear Energy's reload licensing methodology Topical Report (NEDE-24011-P-A-11, "General Electric Standard Application for Reactor Fuel (GESTAR II)" dated November 1995). The safety limit minimum critical power ratio value is selected to maintain the fuel cladding integrity safety limit (i.e., that 99.9 percent of all fuel rods in the core are expected to avoid boiling transition during operational transients). Appropriate operating limit minimum critical power ratio values are established, based on the safety limit minimum critical power ratio value, to ensure that the fuel cladding integrity safety limit is maintained. The operating limit minimum critical power ratio values are incorporated in the Core Operating limits Report as required by Technical Specification 6.9.3.1. The new GE13 safety limit minimum critical power ratio value of 1.09 is based on the same fuel cladding integrity safety limit criteria at that for the GE11 safety limit minimum critical power ratio value of 1.07 (i.e., that 99.9 percent of all fuel rods in the core are expected to avoid boiling transition during operational transients); therefore, the proposed change does not result in a significant reduction in the margin of safety.

Proposed Change 2:

As previously stated, the purpose of the standby liquid control is to inject a neutron absorbing solution into the reactor in the event that a sufficient number of control rods cannot be inserted to maintain subcriticality. Sufficient solution is to be injected such that the reactor will be brought from maximum rated power conditions to subcritical over the entire reactor temperature range from maximum operating to cold shutdown conditions. General Electric methodology establishes a fuel type dependent standby liquid control system shutdown margin to account for calculational uncertainties. General Electric calculations show that an in-vessel concentration of 660 ppm will provide a standby liquid control system minimum shutdown margin in excess of the 3.2% Δk value required for the GE13 fuel. To achieve an in-vessel concentration of 660 ppm, the acceptable range of standby

liquid control system tank concentrations is being revised for the lower range of tank volumes. Thus, the proposed revision of the standby liquid control system sodium pentaborate volume-concentration range ensures that there will not be a significant reduction in the amount of available shutdown margin and, therefore, not a significant reduction in the margin of safety.

ENCLOSURE 3

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
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OPERATING LICENSE NO. DPR-71
REQUEST FOR LICENSE AMENDMENT
FUEL CYCLE 11 RELOAD LICENSING

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, or (3) result in an increase in individual or cumulative occupational radiation exposure. Carolina Power & Light Company has reviewed this request and believes 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(c), no environmental impact statement of environmental assessment needs to be prepared in connection with the issuance of the amendment. The basis for this determination follows.

1. This amendment does not involve a significant hazards consideration, as shown in Enclosure 2.

2. The proposed license amendment does not result in a significant change in the types or a significant increase in the amounts of any effluent that may be released offsite. The proposed license 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 presently designed to perform. The proposed license amendment does not alter the function of existing equipment and will ensure that the consequences of any previously evaluated accident do not increase. Therefore, CP&L has concluded that there will not be a significant increase in the types or amounts of any effluent that may be released offsite and, as such, does not involve irreversible environmental consequences beyond those already associated with normal operation.

3. This amendment does not result in an increase in individual or cumulative occupational radiation exposure.

ENCLOSURE 4

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
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PAGE CHANGE INSTRUCTIONS UNIT 1	
Removed page	Inserted page
2-1	2-1
3/4 1-20	3/4 1-20
5-1	5-1

ENCLOSURE 5

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
NRC DOCKET NO. 50-325
OPERATING LICENSE NO. DPR-71
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FUEL CYCLE 11 RELOAD LICENSING

MARKED-UP TECHNICAL SPECIFICATION PAGES - UNIT 1