



Carolina Power & Light Company

P.O. Box 1551 • Raleigh, N.C. 27602

DEC 31 1992

SERIAL: NLS-92-280

10 CFR 50.90

TSC 89TSB06

R. B. STARKEY, JR.

Vice President

Nuclear Services Department

United States Nuclear Regulatory Commission

ATTENTION: Document Control Desk

Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62  
REQUEST FOR LICENSE AMENDMENT  
CORE ALTERATIONS

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), Units 1 and 2.

The proposed amendments revise the Brunswick Technical Specifications 1.0, 3.9.3, and Bases section B 3/4.9.3. Specification 1.0, DEFINITIONS, is being amended to specify that the movement of incore instruments, (source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special moveable detectors), including undervessel replacement of these items, is not considered a CORE ALTERATION. Specification 1.0, DEFINITIONS, is also amended by these proposed amendments to specify that control rod movement with other than the normal control rod drive is not considered a CORE ALTERATION, provided there are no fuel assemblies in the associated core cell. Other minor text clarifications are proposed as well in the CORE ALTERATION definition.

Specification 3.9.3, Control Rod Position, is being amended to clarify that the Specification is applicable only during the loading of fuel assemblies into the reactor core. The Specification is currently applicable during core alterations, which presents a contradiction between the Specification and the definition of core alteration. As such, the applicability and surveillance requirements are being revised to delete the reference to "CORE ALTERATIONS" and incorporate "loading of fuel assemblies into the core." The action statement is also being revised to delete the provision to "de-energize the control rod solenoid valves" and incorporate "suspend loading of fuel assemblies into the core." This will more accurately direct operators to prevent unwanted reactivity changes and is more congruent with the proposed changes to the applicability and surveillance requirements. The Bases section 3/4.9.3, corresponding to this specification, is also being revised to reflect these clarifications and better articulate what constitutes a core alteration.

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.

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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 issuance of the amendment.

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

Enclosure 5 provides the proposed Technical Specification pages for Unit 1.

Enclosure 6 provides the proposed Technical Specification pages for Unit 2.

Enclosure 7 provides the typed Technical Specification pages for Unit 1.

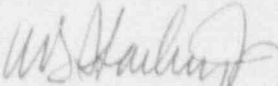
Enclosure 8 provides the typed Technical Specification pages for Unit 2.

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.

In order to allow time for 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 with an effective date to be no later than 60 days from the issuance of the amendment.

Please refer any questions regarding this submittal to Mr. D. B. Waters at (919) 546-3678.

Yours very truly,

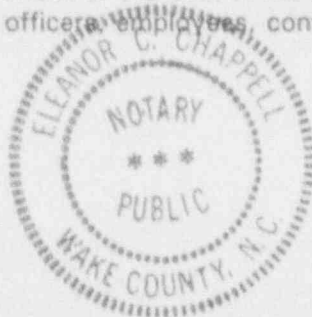
  
R. B. Starkey, Jr.

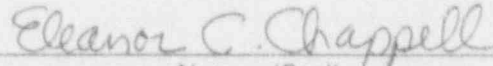
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Enclosures:

1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Environmental Considerations
4. Page Change Instructions
5. Technical Specification Pages - Unit 1
6. Technical Specification Pages - Unit 2
7. Re-typed Technical Specification Pages - Unit 1
8. Re-typed Technical Specification Pages - Unit 2

R. B. Starkey, Jr., 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 2/6/96

Document Control Desk  
NLS-92-280 / Page 3

cc: Mr. Dayne H. Brown  
Mr. S. D. Ebnetter  
Mr. R. H. Lo  
Mr. R. L. Prevatte

## ENCLOSURE 1

### BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2 NRC DOCKET NOS. 50-325 & 50-324 OPERATING LICENSE NOS. DPR-71 & DPR-62 REQUEST FOR LICENSE AMENDMENT CORE ALTERATIONS

#### BASIS FOR CHANGE REQUEST

##### Background:

Following the Cycle 7 reload of the Brunswick-1 reactor vessel while in Operational Condition 5, post-refueling testing of the control rod drive units was initiated to verify operability of the control rod drives. The reactor vessel head was removed at the time. A concern was raised by an NRC Resident Inspector as to whether the Brunswick Technical Specifications allowed the testing which was in progress (see Inspection Reports Nos. 50-325/89-05 and 50-324/89-05, dated April 6, 1989). Specifically, Technical Specification 3.9.3 requires that all control rods be fully inserted while in Operational Condition 5, during core alterations. The existing definition of a core alteration is as follows:

CORE ALTERATION shall be the addition, removal, relocation, or movement of fuel, sources, incore instruments, or reactivity controls in the core with the vessel head removed and fuel in the vessel. Suspension of core alterations shall not preclude completion of the movement of a component to a safe conservative location.

Based on the above, the Resident Inspector concluded that the control rod testing being performed was a core alteration. The Resident Inspector also concluded that no violation of Technical Specifications occurred as a result of the testing. CP&L agreed to submit Technical Specification amendments to clarify this situation.

##### Proposed Change:

###### Part 1: Core Alterations

The first part of this amendment request will revise the definition of core alterations in section 1.0, DEFINITIONS, for both unit Technical Specifications. The definition will specify that the movement of incore instruments, (source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special moveable detectors), including undervessel replacement of these items, is not considered a core alteration. The definition will also specify that control rod movement with other than the normal control rod drive is not considered a core alteration, provided there are no fuel assemblies in the associated core cell. In addition, the phrase "addition, removal, relocation, or movement" is being replaced with the word "movement," and the phrase "components, or other components affecting reactivity" is being incorporated as well as the editorial changes incorporating "vessel" and "position". Specifically, the underlined text in the following revised definition revision represents the requested changes:

## CORE ALTERATION

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. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing in-core probe monitors, or special moveable detectors (including undervessel replacement) is not considered a CORE ALTERATION.

In addition, control rod movement with other than the normal control rod drive is not considered a CORE ALTERATION provided there are no fuel assemblies in the associated core cell. Suspension of CORE ALTERATIONS shall not preclude completion of the movement of a component to a safe position.

### Part 2: Specification 3.9.3, Control Rod Position

The second part of this amendment request revises Specification 3/4.9.3 (and associated bases), Control Rod Position, to clarify the applicability, action statement, and surveillance requirement of this specification. Currently, Specification 3.9.3 requires all control rods to be inserted in Operational Condition 5 during core alterations. The proposed change clarifies the Limiting Condition for Operation (LCO) applicability, surveillance requirements, and associated bases to specify that the requirement to maintain all control rods inserted is only applicable during loading of fuel assemblies into the core. The applicability of the LCO, the surveillance requirements, and the corresponding bases are revised to delete the references to "CORE ALTERATIONS" and incorporate the language "loading of fuel assemblies into the core." In addition, the action statement has been revised to reflect this clarification by deleting the current phrase "de-energize the control rod scram solenoid valves" and incorporating "suspend loading fuel assemblies into the core."

These changes described in the above two parts of this amendment request will correct the contradiction between the noted Specification and the core alteration definition.

### Basis:

#### Part 1: Core Alterations

The purpose of the definition of Core Alterations is to identify operations which have the potential for adding positive reactivity to the core while the vessel head is removed and fuel is in the vessel. While such operations are in progress, special precautions must be taken to preclude the possibility of an inadvertent criticality. These precautions are comprised mainly of additional safety system operability requirements.

Incore instruments are being excluded from this definition because the amount of fissile material contained in the detectors is so minimal that their movement does not result in any significant change in core reactivity. Therefore, movement of incore instruments does not involve an increase in the probability of an inadvertent criticality and no special precautions are necessary to preclude such an event. Removing the requirement to maintain operability of additional safety systems during incore instrument movement will provide additional flexibility to the outage planning process. Systems which were previously required to be operable during incore instrument movement could be made inoperable during required surveillance testing or preventive maintenance.



Listing the specific types of fuel movement is unnecessary. Removal of the redundant words "addition", "removal", "relocation" has no impact on the meaning of the definition. The addition of the new phrase "components, or other components affecting reactivity" will better inform Technical Specification users that other incore operations could impact core reactivity. The other editorial changes to revise "core" to "vessel" and "location" to "position" were made to make the definition identical to that in the Improved Standard Technical Specification for BWR/4 plants (NUREG-1433, Revision 0). Control rod movement with other than the normal control rod drive with no fuel assemblies in the associated core cell does not have an impact on the reactivity of the remaining core. Therefore, control rod movement with other than the normal control rod drive with no fuel assemblies in the associated cell does not involve an increase in the probability of an inadvertent criticality and no special precautions are necessary to preclude such an event.

#### Part 2: Specification 3.9.3, Control Rod Position

Specification 3.9.3 requires that all control rods be inserted in the reactor core; however this is only appropriate during loading of fuel assemblies into the reactor core. The one-rod-out interlock feature is specifically designed to allow a single control rod to be withdrawn when in Operational Condition 5, REFUELING. Since control rod movement is a core alteration, movement of a control rod under these conditions would violate the specification. (There are, however, two exceptions noted in Specification 3.9.3 which allow for single/multiple rod and/or its associated control rod drive mechanism to be removed from the reactor pressure vessel. These exceptions, by the restrictive nature of the requirements imposed in the LCO, do not constitute a core alteration). Control rod movement outside of these exceptions would be considered normal control rod movement. Such control rod movement by normal means in Operational Condition 5 would be done to perform friction testing of control rods immediately following refueling and before the head is placed on the vessel. Other normal movement would be done to troubleshoot control rod drives to determine maintenance requirements.

Therefore, the proposed amendments clarify the applicability of Specification 3.9.3 by deleting the reference to "CORE ALTERATIONS" and incorporating the language "loading of fuel assemblies into the core."

Prevention and mitigation of prompt reactivity excursions while in Operational Condition 5 is provided by the one-rod-out interlock (BSEP Specifications 3.9.1 and 3.9.2), maintaining proper shutdown margin (BSEP Specification 3.1.1), the Intermediate Range Monitor neutron Flux scram (BSEP Specification 3.3.1), the Average Power Range Monitor neutron flux scram (BSEP Specification 3.3.1), and the control rod block instrumentation (BSEP Specification 3.3.4). These precautions prevent an unexpected prompt criticality in Operational Condition 5. As such, the clarification to the applicability of Specification 3.9.3, requiring all control rods to be inserted only during loading of fuel assemblies into the reactor core, will not significantly reduce the margin of safety.

The action statement for BSEP Technical Specification 3.9.3 and Surveillance Requirement 4.9.3 are also revised to provide consistency with the revised applicability of Technical Specification 3.9.3. Currently, when the action statement is not satisfied (i.e., all control rods not inserted), the control rod scram solenoid valves must be de-energized (which causes a reactor scram). The appropriate action with the new applicability statement is to suspend loading of fuel assemblies into the core. This will make the language of the required actions congruent with the applicability language of the LCO.

Surveillance Requirement 4.9.3 has also been revised according to the logic outlined above for the Specification applicability. Accordingly, it is appropriate to delete the reference to "CORE ALTERATIONS" and incorporate "loading of fuel assemblies into the core." This will make the language of the surveillance requirements congruent with the applicability language of the LCO.

Other references to "CORE ALTERATIONS" within the Technical Specifications have been reviewed for potential contradiction with the existing Core Alterations definition. These sections are as follows:

- 4.1.1 Shutdown Margin
- 4.1.2 Reactivity Anomalies
- 4.1.3.2 Control Rod Maximum Scram Insertion Times
- T3.3.1-1 Reactor Protection System Instrumentation
- T3.3.2-1 Isolation Actuation Instrumentation
- 3.6.5.1 Secondary Containment Integrity
- 3.6.5.2 Secondary Containment Automatic Isolation Dampers
- 3.6.6.1 Standby Gas Treatment System
- 3.8.2.2 A.C. Distribution - Shutdown Of Both Units
- 3.8.2.4.2 D.C. Distribution - Shutdown
- 3.9.1 Reactor Mode Switch
- 4.9.1.1, 4.9.1.2 Reactor Mode Switch
- 3.9.2 Instrumentation
- 4.9.2 Instrumentation
- 3.9.5 Communications

The review determined that none of the above specifications are in contradiction with the current Core Alterations definition and, therefore, do not require revision.

## ENCLOSURE 2

### BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2 NRC DOCKET NOS. 50-325 & 50-324 OPERATING LICENSE NOS. DPR-71 & DPR-62 REQUEST FOR LICENSE AMENDMENT CORE ALTERATIONS

#### 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. Pursuant to 10 CFR 50.91(a)(1), Carolina Power & Light Company has reviewed this proposed license amendment request and determined that its adoption would not involve a significant hazards consideration. The bases for this determination are as follows:

#### Proposed Change:

##### Part 1: Core Alterations

The first part of this amendment request will revise the definition of core alterations in section 1.0, DEFINITIONS, for both unit Technical Specifications. The definition will specify that the movement of incore instruments, (source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special moveable detectors), including undervessel replacement of these items, is not considered a core alteration. The definition will also specify that control rod movement with other than the normal control rod drive is not considered a core alteration, provided there are no fuel assemblies in the associated core cell. In addition, the phrase "addition, removal, relocation, or movement" is being replaced with the word "movement," and the phrase "components, or other components affecting reactivity" is being incorporated as well as the editorial changes incorporating "vessel" and "position". Specifically, the underlined text in the following revised definition revision represents the proposed changes:

#### CORE ALTERATION

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. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing in-core probe monitors, or special moveable detectors (including undervessel replacement) is not considered a CORE ALTERATION.

In addition, control rod movement with other than the normal control rod drive is not considered a CORE ALTERATION provided there are no fuel assemblies in the associated core cell. Suspension of CORE ALTERATIONS shall not preclude completion of the movement of a component to a safe position.



## Part 2: Specification 3.9.3, Control Rod Position

The second part of this amendment request revises Specification 3/4.9.3 (and associated bases), Control Rod Position, to clarify the applicability, action statement, and surveillance requirement of this specification. Currently, Specification 3.9.3 requires all control rods to be inserted in Operational Condition 5 during core alterations. The proposed change clarifies the Limiting Condition for Operation (LCO) applicability, surveillance requirements, and associated bases to specify that the requirement to maintain all control rods inserted is only applicable during the loading of fuel assemblies into the core. The applicability of the LCO, the surveillance requirements, and the corresponding bases are revised to delete the references to "CORE ALTERATIONS" and incorporate the language "loading of fuel assemblies into the core." In addition, the action statement has been revised to reflect this clarification by deleting the current phrase "de-energize the control rod scram solenoid valves" and incorporating "suspend loading of fuel assemblies into the core."

### Basis:

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

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

### Part 1: Core Alterations

The purpose of the definition of core alterations is to identify operations which have the potential for adding reactivity to the core while the vessel head is removed and fuel is in the vessel. While such operations are in progress, special precautions must be taken to preclude the possibility of an inadvertent criticality. These precautions are comprised mainly of additional safety system operability requirements.

The BSEP Updated Final Safety Analysis Report (UFSAR) for Units 1 and 2 contain analyses for the following refueling accidents involving the possibility of an inadvertent criticality:

- Control Rod removal error during refueling (UFSAR section 15.4.5.1)
- Fuel assembly insertion error during refueling (UFSAR section 15.4.5.2)

The movement of incore instruments (excluded from the proposed core alterations definition) does not apply to either of these analyses because the amount of fissile material contained in the detectors is so minimal that their movement does not result in a significant change in core reactivity. As such, the additional safety systems would not be required or necessary for incore instrument movement. Control rod movement with other than the normal control rod drive with no fuel assemblies in the associated core cell does not have an impact on the reactivity of the remaining core. Therefore, control rod movement with other than the normal control rod drive with no fuel assemblies in the associated cell does not involve an increase in the probability of an inadvertent criticality; consequently no special precautions are necessary to preclude such an event and there is no associated significant increase in the probability of an accident. The deletion of the phrase "addition, removal, relocation" from the definition eliminates redundancy and does not change the meaning of the definition. In addition, the incorporation of the phrase "components, or other components affecting reactivity" will key Technical Specification users to consider

other types of operations affecting core reactivity. Therefore, the noted revisions to the definition of core alterations does not involve a significant increase in the probability of an accident previously evaluated.

Since the incore instruments are not factored into the current analyses for previously evaluated accidents, their removal from the definition of core alterations, along with the minor text changes noted above, would have no impact on previously evaluated accident consequences. The additional safety systems would also not be required operable for incore instrument movement and, therefore, would not impact the consequences of an accident previously evaluated.

Control rod movement with other than the normal control rod drive with no fuel assemblies in the associated core cell is also being excluded from this definition because movement of a control rod blade with fuel assemblies removed from the core does not have an impact on the reactivity of the remaining core. Therefore, control rod movement with other than the normal control rod drive with no fuel assemblies in the associated cell does not involve an increase in the probability of an inadvertent criticality; consequently no special precautions are necessary to preclude such an event and there is no associated impact on the consequences of an accident previously evaluated.

From the discussion presented above, the noted revisions to the definition of core alterations do not involve a significant increase in the probability or consequences of an accident previously evaluated.

#### Part 2: Specification 3.9.3, Control Rod Position

The Specification 3.9.3 requirement for all control rods to be inserted is appropriate only during the loading of fuel assemblies into the reactor core. The one-rod-out interlock is specifically designed to allow a single control rod to be withdrawn when in Operational Condition 5. Since control rod movement is a core alteration by definition, it is contradictory that the control rod position specification is applicable in "CONDITION 5, during CORE ALTERATIONS".

Prevention and mitigation of prompt reactivity excursions while in Operational Condition 5 is provided by the one-rod-out interlock (BSEP Specifications 3.9.1 and 3.9.2), maintaining proper shutdown margin (BSEP Specification 3.1.1), the Intermediate Range Monitor neutron flux scram (BSEP Specification 3.3.1), the Average Power Range Monitor neutron flux scram (BSEP Specification 3.3.1), and the control rod block instrumentation (BSEP Specification 3.3.4). These precautions prevent an unexpected prompt criticality in Operational Condition 5. The proposed change indicates that all control rods must be inserted during loading of fuel assemblies into the core.

The action statement for BSEP Technical Specification 3.9.3 and Surveillance Requirement 4.9.3 are also revised to provide consistency with the revised applicability of Technical Specification 3.9.3. Currently, when the action statement is not satisfied (i.e., all control rods not inserted), the control rod scram solenoid valves must be de-energized, which causes a reactor scram. The appropriate action is to suspend loading of fuel assemblies into the reactor core. Incorporating this action will make the language congruent with the applicability language. In addition, the revision to the surveillance requirement, deleting the reference to "CORE ALTERATIONS" and incorporating the phrase "during loading of fuel assemblies into the core" will also make the language congruent to the language in the

specification applicability. The Chapter 15 analyses for refueling accidents are not affected by the changes to Specification 3.9.3. The new phraseology to replace "CORE ALTERATIONS" better articulates the conditions where control rods are required to be fully inserted. In addition, the proposed changes to Specification 3.9.3 still preserve the basis of this specification, which is to prevent two positive reactivity changes from occurring simultaneously.

Based on the above, therefore, the changes to Specification 3.9.3 do not involve a significant increase in the probability of an accident previously evaluated.

The Chapter 15 accidents associated with refueling are not affected by this specification change. In addition, the various features for the prevention and mitigation (i.e., consequences) of prompt reactivity excursions, discussed above, are not impacted by this change. As such, the proposed changes to Specification 3.9.3 do not involve a significant increase in the consequences of an accident previously evaluated.

Therefore, based on the discussion above, the proposed amendments do not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

#### Part 1: Core Alterations

As discussed previously, the amount of fissile material contained in the incore instruments is so minimal that instrument movement does not result in a significant change in core reactivity. Therefore, instrument movement of this type could not cause an inadvertent criticality.

Control rod movement with other than the normal control rod drive with no fuel assemblies in the associated core cell does not have an impact on the reactivity of the remaining core and therefore does not increase the probability of an inadvertent criticality.

Deletion of the redundant phrase "addition, removal, relocation" from the definition eliminates redundancy and does not change the meaning of the definition. In addition, the incorporation of the phrase "components, other components affecting reactivity" will key Technical Specification users to consider other types of operations affecting core reactivity.

The other minor text changes "vessel" and "position" were made for consistency with the Improved STS and have no impact on the intent of the revised definition.

From the discussion presented above, the noted revisions to the definition of core alterations does not create the possibility of a new or different kind of accident from any accident previously evaluated.

#### Part 2: Specification 3.9.3, Control Rod Position

The revision to Specification 3.9.3 does not involve physical changes to any safety related equipment or changes to plant operation. The method by which any equipment performs will also not be altered by these changes. The revision to specification 3.9.3 eliminates

unnecessary and inappropriate requirements regarding reactivity control. As discussed previously, inadvertent criticality is prevented by the one-rod-out interlock feature in Operational Condition 5. As such, it is not necessary to have all control rods inserted at times other than during loading of fuel assemblies into the reactor core. Therefore, the proposed changes to Specification 3.9.3 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.

#### Part 1: Core Alterations

Since the definition of CORE ALTERATION has no impact on any safety limits, setpoints, or plant design, the proposed changes have no affect on the margin of safety. The proposed definition changes further detail what constitutes a core alteration. Therefore, the proposed changes to the definition of core alterations do not involve a significant reduction in the margin of safety.

#### Part 2: Specification 3.9.3, Control Rod Position

The revisions to Specification 3.9.3 have no impact on any safety limits, setpoints, or plant design and have no affect on the margin of safety. Reactivity control functions and associated surveillance frequencies are not impacted by these changes. Therefore, the proposed changes to Specification 3.9.3 do not involve a significant reduction in the margin of safety.

### ENCLOSURE 3

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2  
NRC DOCKET NOS. 50-325 & 50-324  
OPERATING LICENSE NOS. DPR-71 & DPR-62  
REQUEST FOR LICENSE AMENDMENT  
CORE ALTERATIONS

#### 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 an 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:

##### Part 1: Core Alterations

The first part of this amendment request will revise the definition of core alterations in section 1.0, DEFINITIONS, for both unit Technical Specifications. The definition will specify that the movement of incore instruments, (source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special moveable detectors), including undervessel replacement of these items, is not considered a core alteration. The definition will also specify that control rod movement with other than the normal control rod drive is not considered a core alteration, provided there are no fuel assemblies in the associated core cell. In addition, the phrase "addition, removal, relocation, or movement" is being replaced with the word "movement," and the phrase "components, or other components affecting reactivity" is being incorporated as well as the editorial changes incorporating "vessel" and "position". Specifically, the underlined text in the following revised definition revision represents the proposed changes:

#### CORE ALTERATION

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. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing in-core probe monitors, or special moveable detectors (including undervessel replacement) is not considered a CORE ALTERATION.



In addition, control rod movement with other than the normal control rod drive is not considered a CORE ALTERATION provided there are no fuel assemblies in the associated core cell. Suspension of CORE ALTERATIONS shall not preclude completion of the movement of a component to a safe position.

#### Part 2: Specification 3.9.3, Control Rod Position

The second part of this amendment request revises Specification 3/4.9.3 (and associated bases), Control Rod Position, to clarify the applicability, action statement, and surveillance requirement of this specification. Currently, Specification 3.9.3 requires all control rods to be inserted in Operational Condition 5 during core alterations. The proposed change clarifies the LCO applicability, surveillance requirements, and associated bases to specify that the requirement to maintain all control rods inserted is only applicable during the loading of fuel assemblies into the core. The applicability of the LCO, the surveillance requirements, and the corresponding bases are revised to delete the references to "CORE ALTERATIONS" and incorporate the language "loading of fuel assemblies into the core." In addition, the action statement has been revised to reflect this clarification by deleting the current phrase "de-energize the control rod scram solenoid valves" and incorporating "suspend loading of fuel assemblies into the core."

The changes described in the above two parts of this amendment request will correct the contradiction between the noted specification and the core alteration definition.

#### 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 changes to the DEFINITIONS and Specification 3/4.9.3 do not alter any protective functions or features associated with incore instrumentation, control rods or control rod movement. Accident mitigation functions are not impacted and thus effluent types and amounts associated with offsite releases are not affected. In addition, surveillance frequencies are not being changed for any of these specifications nor are plant operations impacted by this amendment request and thus routine operational effluents are not affected.

Therefore, the proposed amendments will not result in a significant change in the types or amounts of any effluents that may be released offsite.

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

This amendment request involves no plant or equipment modifications. The clarifications to the specifications correct discrepancies between the definition of CORE ALTERATIONS and Specification 3.9.3. The intent of the core alteration definition remains the same. The Specification 3.9.3 changes do not involve issues of personnel exposure. While individual and cumulative exposure are involved during refueling operations, this clarification has no impact on radiation exposures and only provides the above noted additional flexibility. Therefore, the proposed amendments have no affect on either individual or cumulative occupational radiation exposure.