



Carolina Power & Light Company

P.O. Box 1551 • Raleigh, N.C. 27602

SERIAL: NLS-91-241

10 CFR 50.90

TSC 91TSB07

DEC 31 1992

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 AMENDMENTS
SERVICE WATER SYSTEM

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 Nos. 1 and 2.

The first part of this amendment request revises the number of nuclear service water pumps required operable whenever either unit is in OPERATIONAL CONDITION 1, 2, or 3 from two nuclear service water pumps per unit to three nuclear service water pumps per site. These revisions are associated with a plant modification recently completed to upgrade (increase) the thrust bearing capacity of the nuclear service water pump motors. The basis for this specification (3/4.7.1.2) has also been rewritten entirely, discussing the rationale behind the ACTION Statements and operability requirements for the service water system. The second part of this amendment request incorporates the surveillance requirements of Technical Specification 4.7.1.2.c into proposed ACTION b.4 of Specification 3.7.1.2, deleting the existing Specification 4.7.1.2.c.

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 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 amendments.

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.

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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 amendments.

Modifications to upgrade the thrust bearing capacity of the nuclear service water pump motors began in December, 1991 and were completed in September, 1992. The pending items which must be completed prior to implementation of these amendments are modifications to delete the minimum flow setpoints for service water valves 1(2)-SW-V103 and 1(2)-SW-V106. These items are scheduled to be completed before May 15, 1993. As such, CP&L requests that the proposed amendments be issued by May 15, 1993. In order to allow time for unforeseen delays, procedure revisions, 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 amendments.

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

Yours very truly,

R. B. Starkey, Jr.
R. B. Starkey, Jr.

DAF/daf (srvwater)

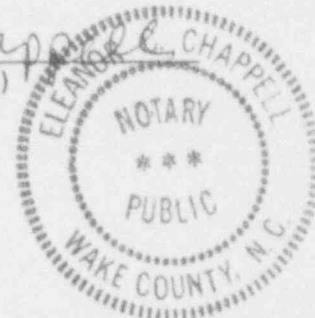
Enclosures:

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

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.

Eleanor C. Chappell
Notary (Seal)

My commission expires: *2/6/96*



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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 DOCKETS 50-325 & 50-324 OPERATING LICENSES DPR-71 & DPR-62 REQUEST FOR LICENSE AMENDMENTS SERVICE WATER SYSTEM

BASIS FOR CHANGE REQUEST

This amendment request involves two parts, and therefore will be discussed as proposed change 1 and proposed change 2.

Background for Proposed Change 1:

The service water system provides water for lubrication and cooling of selected equipment in the turbine building, reactor building, diesel generator building, circulating water system, and screen wash system. The service water system is subdivided into two major headers, nuclear and conventional, which are normally operated independently. The nuclear header supplies service water to selected vital equipment in the reactor building and the diesel generator building. The conventional header may supply service water to vital equipment in the reactor building and normally supplies equipment in the turbine building and balance-of-plant equipment in other areas.

Two service water pumps are dedicated to supply the nuclear header and three service water pumps supply the conventional header for each unit. Each nuclear service water pump is powered from a separate emergency bus. Cross-connect valves allow the conventional pumps to supply the nuclear header as conditions dictate. Presently, both types of service water pumps are essentially identical except that the nuclear service water pumps are capable of re-starting automatically following restoration of power to the emergency buses after loss of normal power. The conventional service water pumps must be started manually under these conditions. In addition, the nuclear service water pumps now have increased thrust bearing capacity.

The emergency diesel generators, which are the only common service water load between the two units, can receive cooling water from the nuclear header of either unit. For each unit, either the conventional or the nuclear header, or a combination of the two, can provide water to other loads including the residual heat removal (RHR) pump room coolers, the RHR pump seal heat exchangers, the core spray (CS) pump room coolers, the RHR service water (RHRSW) system, the reactor building closed cooling water (RBCCW) system, lubricating water for the service water pumps, and cooling water for the service water pump motors. The conventional header normally supplies cooling water to the turbine building closed cooling water system. The service water system can also be cross-connected to the RHR system during emergencies to provide core flooding capabilities.

Current Requirement:

Presently, Technical Specification 3.7.1.2 requires at least two operable nuclear service water pumps along with two operable conventional service water pumps capable of supplying the nuclear and conventional service water headers with the unit in OPERATIONAL CONDITIONS 1, 2, or 3. When the unit is in OPERATIONAL CONDITIONS 4 or 5, three operable site nuclear service water pumps are required, along with two operable unit service water pumps, nuclear or conventional, powered from separate emergency buses and capable of supplying the nuclear service water header. The reduced service water system operability requirements for OPERATIONAL CONDITIONS 4 and 5 are justified due to operator accessibility to the Reactor Building following an initiating event where manual valve operation is required, since a high energy line break is not credible in these conditions.

Proposed Change 1:

The proposed change will revise the number of nuclear service water pumps required operable with the unit in OPERATIONAL CONDITION 1, 2, or 3 from two nuclear service water pumps per unit to three nuclear service water pumps per site. The Limiting Condition for Operation (LCO) and ACTION Statements for Specification 3.7.1.2 are affected by this change. The basis for this specification has also been rewritten entirely, discussing the rationale behind the ACTION Statements and operability requirements for the service water system.

Basis for Proposed Change:

This change is a result of modifications made to the nuclear service water pump motors to increase the thrust bearing capacity. Previously, the motor's thrust bearing could fail due to overloading at pump flows lower than approximately 1500 gpm per pump. To prevent this condition, a minimum flow path from the nuclear header was maintained to provide at least 3000 gpm flow (1500 gpm per nuclear service water pump minimum) in all credible accident conditions. With the minimum flow path, three nuclear service water pumps are required to ensure adequate cooling for the emergency diesel generators in the worst case conditions. By replacing the previous thrust bearing with a larger bearing capable of more than the maximum possible thrust load from the pump, the service water pumps and motors can survive all credible low flow conditions and the minimum flow path will no longer be required. This will be accomplished by deleting the minimum flow setpoints for service water valves 1(2)-SW-V103 and 1(2)-SW-V106. Without this minimum flow path, only two nuclear service water pumps are required to ensure adequate cooling for the four emergency diesel generators under all normal operating or accident conditions (assuming the single failure has disabled the third nuclear service water pump). These modifications were made for the motors on the four nuclear service water pumps first; the modifications for the motors on the conventional service water pumps are currently planned to be completed by 1995. The pending modifications have no impact on this amendment request.

During the initial stage (0 to 10 minutes) of a design basis accident (DBA), the service water system must automatically provide cooling water to the emergency diesel generators. The service water system design allows either or both unit's nuclear headers to supply emergency diesel generator cooling water. Two nuclear service water pumps are capable of supplying sufficient flow to cool the four emergency diesel generators under worst-case scenarios with all other potential demands on the nuclear headers for OPERATIONAL CONDITIONS 1, 2, and 3. Therefore, any combination of three OPERABLE nuclear service water pumps will meet the single failure criteria and ensure emergency diesel generator cooling. The proposed change requires at least three operable nuclear service water pumps per site in OPERATIONAL CONDITIONS 1, 2, or 3 to satisfy the 0-10 minute automatic response requirements for the nuclear service water pumps.

In OPERATIONAL CONDITIONS 4 or 5, two nuclear service water pumps are required to ensure cooling for the emergency diesel generators (assuming the single failure has disabled the third nuclear service water pump). Based on this requirement and taking into account single failure criteria, three OPERABLE nuclear service water pumps are required. Therefore, no change is needed to the current technical specification requirement of three OPERABLE nuclear service water pumps per site in OPERATIONAL CONDITIONS 4 and 5.

After the first ten minutes following a DBA, the service water system must be capable of providing cooling to other loads in addition to the emergency diesel generators. The number of service water pumps (nuclear or conventional) required for each unit remains the same as existing Technical Specification 3.7.1.2. The proposed change does not affect these requirements. In OPERATIONAL CONDITIONS 1, 2, and 3, two operable conventional service water pumps capable of supplying the nuclear and conventional headers will ensure that at least one unit pump will be operable after a single failure and that remote operator action can make the necessary pump, header, and valve alignments. Manual operator action in the reactor building is not credited because of the potential for unsafe conditions in the reactor building following a LOCA.

In OPERATIONAL CONDITIONS 4 and 5, two operable service water pumps (nuclear or conventional) powered from separate emergency buses and capable of supplying the nuclear header will ensure that at least one unit pump will be operable after a single failure and that remote or manual operator action can make the necessary pump, header, and valve alignments. Manual operator action in the reactor building is credited because the potential for unsafe conditions in the reactor building in OPERATIONAL CONDITIONS 4 and 5 is not credible.

Table 1 identifies the designation for each service water pump, the header served by the pump, the unit served by the pump, and the emergency diesel generators supplying power to the pump motor.

Table 2 identifies the number of unit nuclear service water pumps, unit conventional service water pumps, and corresponding site nuclear service water pumps required OPERABLE for each operating condition covered by the proposed LCO and associated ACTION statements. The table summarizes the deficient condition, allowed out-of-service time, and the required compensating actions for each of these conditions.

TABLE 1

| Unit Served | Header Served | Pump Designation | EDG Providing Power |
|-------------|---------------|------------------|---------------------|
| 1 | Nuclear | A | 1 |
| 1 | Nuclear | B | 2 |
| 1 | Conventional | A | 4 |
| 1 | Conventional | B | 1 |
| 1 | Conventional | C | 2 |
| 2 | Nuclear | A | 3 |
| 2 | Nuclear | B | 4 |
| 2 | Conventional | A | 3 |
| 2 | Conventional | B | 4 |
| 2 | Conventional | C | 1 |

TABLE 2, TECHNICAL SPECIFICATION 3.7.1.2 SUMMARY TABLE

| OPERATIONAL CONDITION | MIN. SW PUMPS REQ'D. | | | DEFICIENCY | ACTION NUMBER | ACTION DESCRIPTION |
|-------------------------------------|---------------------------------|-------|---------------|---|------------------|---|
| | UNIT SW PUMPS | | SITE NSWPs | | | |
| | NSWPs | CSWPs | | | | |
| 3.7.1.2: OP CON 1,2,3 | 1,2 | 2 | 3 | NONE | N/A | None |
| 3.7.1.2: OP CON 4,5 | 2 | 0 | 3 | NONE | N/A | None |
| | 1 | 1 | 3 | | | |
| 3.7.1.2 ACTION a OP CON 1,2,3 | 1,2 | 1 | 3 | One less CSWP than required | a.1 | Restore add'l CSWP in 7 days or shut down |
| | 1,2 | 0 | 3 | No OPERABLE CSWPs | a.2 | Restore one CSWP in 12 hours or shut down |
| | NA | 2 | 2 | One less site NSWPs than required | a.3 | Unless ACTION b.4 applies for other unit, restore add'l NSWP in 7 days or shut down |
| | NA | 0,1 | 2 | One less site NSWPs than required and less than two CSWPs | a.4 | Restore 2 CSWPs in 12 hrs or shut down |
| | NA | NA | 0,1 | Less than two site NSWPs, CSWPs not applicable | a.5 | Shut down |
| 3.7.1.2 ACTION b OP CON 4,5 | 1 | 0 | 3 | One less unit SWPs than required (ACTION b.3 may apply) | b.1 | Restore two unit SWPs in 7 days or declare core spray and LPCI systems inoperable |
| | 0 | 1 | 2 | | | |
| | 0 | 0 | 2 | No OPERABLE unit SWPs | b.2 | Declare core spray and LPCI systems inoperable |
| | NA | NA | 2 | One less site NSWPs than required | b.3 | Unless ACTION b.4 applies, restore add'l NSWPs in 7 days or declare EDGs inoperable |
| | Nuclear header Inoperable | 2 | 2 | Nuclear header inoperable | b.4 | Restore three NSWPs in 14 days or declare core spray, LPCl, and EDGs inoperable |
| | NA | NA | 0,1 | Less than two site NSWPs | b.5 | Declare EDGs inoperable |

Acronyms/Abbreviations: NSWPs - nuclear service water pump
 CSWPs - conventional service water pump
 LPCI - low pressure coolant injection
 EDG - emergency diesel generator

SW - service water
 OP CON - Operational Condition

Background for Proposed Change 2:

Each unit's service water system nuclear header can provide cooling water to each diesel generator through motor operated 6 inch supply valves. Diesel generators 1 and 2 are normally fed from the Unit 1 service water system; diesel generators 3 and 4 are normally fed from the Unit 2 service water system. During the diesel generator start sequence, the normal supply valve automatically opens when the diesel reaches 500 rpm. If adequate service water pressure at the diesel jacket water heat exchanger is not sensed within 25 seconds, a signal is generated to open the secondary supply valve from the other unit's service water system. When the secondary supply valve reaches full open, a signal is generated to close the normal supply valve.

When one unit's nuclear header is inoperable, the 6 inch service water system supply valves to the diesel generators from that unit will be administratively controlled in the closed position. For a diesel generator start during this period, the two diesel generators normally fed from the inoperable nuclear header will not sense flow in the jacket water heat exchanger and the secondary valve from the other unit will open. The cooling water supply for the two diesel generators normally fed from the other unit will actuate normally. However, in case of low pressure or inadvertent instrument action, the secondary supply valves will be prevented from opening on the inoperable nuclear header and the primary valves will remain open.

The diesel generator service water supply isolation valve for the unaffected unit is administratively controlled in the open position to ensure the cooling water supply is not interrupted inadvertently. The conventional service water pump cross-tie valves to the inoperable nuclear service water header are administratively controlled in the closed position to ensure proper operation of the conventional service water header. The isolation valves from the inoperable nuclear service water header to the vital header, Residual Heat Removal system, and Reactor Building Closed Cooling Water system are administratively controlled in the closed position to ensure proper operation.

Current Requirement:

Presently, Technical Specification 4.7.1.2.c requires that in OPERATIONAL CONDITION 4 or 5 with the service water system nuclear header inoperable, the following conditions be met:

1. The service water system conventional header be verified as aligned to supply cooling water to vital ECCS loads.
2. The other unit's nuclear header be aligned to supply cooling water to the diesel generators by verifying that each valve servicing the diesel generators that is not locked open is administratively controlled in the proper position.

Proposed Change 2:

Proposed Technical Specification 3.7.1.2, ACTION b.4 will incorporate the following requirements/restrictions (Unit 1 shown as example):

With the service water system nuclear header inoperable, operation of both units may continue provided that:

1. Two Unit 2 nuclear service water pumps are OPERABLE,
2. Both unit's nuclear service water header valves are administratively controlled as required to ensure cooling water to the diesel generators.
3. At least two Unit 1 conventional service water pumps are OPERABLE on the conventional header.
4. Vital ECCS loads are aligned to the conventional service water system header.

Restore the service water system nuclear header and at least three site nuclear service water pumps to OPERABLE status within 14 days. Otherwise, declare the core spray system, the LPCI system, and the diesel generators inoperable.

In addition, a (current) incorrect cross reference to Specification 3.7.1.2, ACTION b.3 in Specification 3.10.5, Plant Service Water, is being corrected to reflect the new sequence of the proposed ACTION statements. Specifically, the reference to Specification 3.7.1.2, ACTION b.3 in both the LCO and ACTION statement of Specification 3.10.5 is being changed to Specification 3.7.1.2, ACTION b.4. The word "OPERATIONAL" is also being incorporated before the word "CONDITIONS" in the applicability statement for Specification 3.10.5. This terminology is congruent with the rest of the Technical Specifications. These changes are editorial.

Basis for Proposed Change:

The existing surveillance requirements of Technical Specification 4.7.1.2.c are event driven (invoked by plant entry into a specific set of operating conditions) rather than scheduler driven, as is the case for most Technical Specification surveillances. Therefore, to clearly define the necessary actions and link the need for the necessary administrative controls associated with the service water system nuclear header being inoperable when the unit is in OPERATIONAL CONDITION 4 or 5, the requirements of Specification 4.7.1.2.c are being incorporated into the new proposed ACTION b.4 of Technical Specification 3.7.1.2. It is appropriate to change the format of this current surveillance requirement into an action statement for the above reasons. This will further emphasize the need for maintaining adequate service water cooling for the emergency diesel generators during periods when one unit's service water system nuclear header is inoperable.

ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2 NRC DOCKETS 50-325 & 50-324 OPERATING LICENSES DPR-71 & DPR-62 REQUEST FOR LICENSE AMENDMENTS SERVICE WATER SYSTEM

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 consideration.

Proposed Change 1:

Proposed change 1 will revise the number of nuclear service water pumps required operable with the unit in OPERATIONAL CONDITION 1, 2, or 3 from two nuclear service water pumps per unit to three nuclear service water pumps per site. The LCO and ACTION Statements for Specification 3.7.1.2 are affected by this change. The basis for this section have also been rewritten entirely, discussing the rationale behind the ACTION Statements and operability requirements for the service water system.

Proposed Change 2:

Proposed change 2 will incorporate the surveillance requirements of Technical Specification 4.7.1.2.c into ACTION b.4 of proposed Technical Specification 3.7.1.2. The existing Technical Specification 4.7.1.2.c will be deleted.

In addition, a (current) incorrect cross reference to Specification 3.7.1.2, ACTION b.3 in Specification 3.10.5, Plant Service Water, is being corrected to reflect the new sequence of the proposed ACTION statements. Specifically, the reference to Specification 3.7.1.2, ACTION b.3 in both the Limiting Condition for Operation (LCO) and ACTION statement of Specification 3.10.5 is being changed to Specification 3.7.1.2, ACTION b.4. The word "OPERATIONAL" is also being incorporated before the word "CONDITIONS" in the applicability statement for Specification 3.10.5. This terminology is congruent with the rest of the Technical Specifications. These changes are editorial.

Basis:

The 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.

Proposed Change 1:

The proposed change requires both the nuclear and the conventional headers to be operable with three site nuclear and two unit conventional service water pumps capable of supplying the headers when the unit is in OPERATIONAL CONDITIONS 1, 2, or 3. The proposed change does not affect the number of service water pumps required operable when the unit is in OPERATIONAL CONDITIONS 4 or 5. These requirements will ensure single failure criteria are met, ensure the availability of service water for emergency diesel generator cooling during the initial ten minute period of a design basis accident, and ensure sufficient service water capability for the post-ten minute period of a design basis accident.

The service water system only aids in mitigation of an accident and does not act as an initiator of an accident sequence. Therefore, the proposed amendments do not involve an increase in the probability of an accident previously evaluated.

The proposed site nuclear service water pump requirements will assure emergency diesel generator cooling will be available following any design basis accident, regardless of which unit is involved in the accident or plant transient. As such, the proposed amendments do not involve a significant increase in the consequences of an accident previously evaluated.

Proposed Change 2:

The proposed change is administrative in nature since the change simply relocates existing remedial actions from an event-based surveillance requirement (Technical Specification 4.7.1.2.c) to the Limiting Condition for Operation ACTION statement. This change will more clearly link the need for the additional verifications associated with the service water system nuclear header being inoperable when the unit is in OPERATIONAL CONDITION 4 or 5. Therefore, the proposed change does not increase the probability an accident previously evaluated.

In addition, this proposed change does not alter the actions involved in the surveillance requirements by relocating these under the ACTION statements. No plant operations are altered by this relocation. As such, this change does not increase the 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.

Proposed Change 1:

The service water system is designed to provide flow for lubrication and cooling of equipment during normal operations and under accident conditions. The system can also provide flow to the chlorination system and be cross-connected to the RHR system during emergencies to provide core flooding capabilities. As noted above, the service water system supports mitigation of an accident, but does not act as an initiator of an accident sequence. The proposed change does not affect the ability of the service water system to perform its intended function. No new service water operations are introduced. The requested amendments will assure that the service water system will be available to provide an adequate supply of cooling water for both normal operating and emergency operating conditions, and will not alter plant operations. Therefore, the proposed amendments do not create the possibility of a new or different kind of accident from any accident previously evaluated.

Proposed Change 2:

As noted in item 1 above, the proposed change is administrative in nature since the change simply relocates existing remedial actions from an event-based surveillance requirement (Technical Specification 4.7.1.2.c) to the Limiting Condition for Operation ACTION statement. This relocation does not involve any changes to safety-related equipment or safety-related functions which could initiate any kind of accident. 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.

Proposed Change 1:

The proposed change revises the service water pump operability requirements to account for the improved low flow capability of the nuclear service water pumps and the elimination of the minimum flow path. The proposed change to the Technical Specifications will ensure the availability of service water for diesel generator cooling during the initial ten minute period of a design basis accident, even assuming the worst case single failure, as well as assure sufficient service water capability for the post-ten minute period of a design basis accident. Therefore, the proposed change does not involve a significant reduction in the margin of safety.

Proposed Change 2:

As noted in items 1 and 2 above, the proposed change is administrative in nature since the change simply relocates existing remedial actions from an event-based surveillance requirement (Technical Specification 4.7.1.2.c) to the Limiting Condition for Operation ACTION statement. No safety limits, setpoints, or design margins are impacted by this change. Therefore, the proposed change does not involve a 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 AMENDMENTS
SERVICE WATER SYSTEM

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 1:

Proposed change 1 will revise the number of nuclear service water pumps required operable with the unit in OPERATIONAL CONDITION 1, 2, or 3 from two nuclear service water pumps per unit to three nuclear service water pumps per site. The LCO and ACTION Statements for Specification 3.7.1.2 are affected by this change. The basis for this specification has also been rewritten entirely, discussing the rationale behind the ACTION Statements and operability requirements for the service water system.

Proposed Change 2:

Proposed change 2 will incorporate the surveillance requirements of Technical Specification 4.7.1.2.c into ACTION b.4 of proposed Technical Specification 3.7.1.2. The existing Technical Specification 4.7.1.2.c will be deleted.

In addition, a (current) incorrect cross reference to Specification 3.7.1.2, ACTION b.3 in Specification 3.10.5, Plant Service Water, is being corrected to reflect the new sequence of the proposed ACTION statements. Specifically, the reference to Specification 3.7.1.2, ACTION b.3 in both the Limiting Condition for Operation (LCO) and ACTION statement of Specification 3.10.5 is being changed to Specification 3.7.1.2, ACTION b.4. The word "OPERATIONAL" is also being incorporated before the word "CONDITIONS" in the applicability statement for Specification 3.10.5. This terminology is congruent with the rest of the Technical Specifications. These changes are editorial.

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 amendments do not involve a significant hazards consideration.
2. The proposed amendments do not result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

Proposed Change 1:

The service water system aids in mitigation of an accident and does not act as an initiator of an accident sequence. The service water system is designed to provide lubrication and cooling of equipment during normal operations and under accident conditions. Because the proposed change to the service water system does not affect the ability of the service water system to perform its intended function and does not create the possibility of a new or different kind of accident, the change does not result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

Proposed Change 2:

The proposed change is administrative in nature since the change simply relocates existing remedial actions from an event-based surveillance requirement (Technical Specification 4.7.1.2.c) into the Limiting Condition for Operation ACTION statement. As such, the change cannot affect the types or amounts of any effluents that may be released offsite.

3. The proposed amendments do not result in an increase in individual or cumulative occupational radiation exposure.

Proposed Change 1:

The nuclear service water system upgrade has resulted in a simpler more reliable design, without changing the basic function of the system. No personnel presence in any radiological environment is necessary for service water system operation. These amendments, therefore, do not result in an increase in individual or cumulative occupational radiation exposure.

Proposed Change 2:

As noted in item 2 above, the proposed change is administrative in nature since the change simply relocates existing remedial actions from an event-based surveillance requirement (Technical Specification 4.7.1.2.c) to the Limiting Condition for Operation ACTION statement. Therefore, the proposed amendments have no effect on either individual or cumulative occupational radiation exposure.

ENCLOSURE 4

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 AMENDMENTS
SERVICE WATER SYSTEM

PAGE CHANGE INSTRUCTIONS

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