



Carolina Power & Light Company

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JAN 12 1993

R. B. STARKEY, JR.
Vice President
Nuclear Services Department

SERIAL: NLS-93-004
10 CFR 50.90
TSC 92TSB11

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
CONTROL BUILDING EMERGENCY VENTILATION SYSTEM
(NRC TAC NOS. M85143 AND M85144)

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.

Modifications being completed on Brunswick Units 1 and 2 will revise the actuation logic in the Control Building Emergency Ventilation System (CBEVS) chlorine detection logic from a fail-safe design to a single-failure proof design. The modification of the logic requires revision of the ACTION statements and SURVEILLANCE REQUIREMENTS in the current Technical Specifications to reflect the increased number of detectors being installed in each detection trip system of the CBEVS and the new type detection equipment. In addition, reviews of the current Technical Specifications have identified deficiencies in the APPLICABILITY requirements, as well as a lack of requirements for the Radiation Protection and Smoke Protection instrumentation in the CBEVS.

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

Enclosure 2 details, in accordance with 10 CFR 50.91(a), the basis for the Company's determination that the proposed changes do not involve a significant hazards consideration.

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

Enclosure 4 provides proposed Technical Specification pages for Unit Nos. 1 and 2. The proposed pages are identical for both units; therefore, only one set is being included for review.

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.

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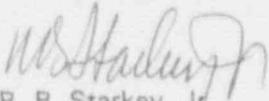
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Document Control Desk
NLS-93-004 / Page 2

Carolina Power & Light Company requests that this amendment be issued no later than March 15, 1993, to support installation of the ongoing CBHVAC System modifications. 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.

KAH/kah (nls93004.wpf)

Enclosures:

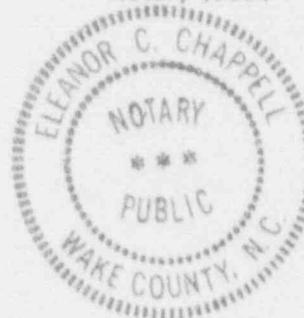
1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Environmental Considerations
4. Proposed Technical Specification Pages - Unit Nos. 1 and 2

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

cc: Mr. Dayne H. Brown
Mr. S. D. Ebnetter
Mr. P. D. Milano
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
CONTROL BUILDING EMERGENCY VENTILATION SYSTEM
(NRC TAC NOS. M85143 AND M85144)

BASIS FOR CHANGE REQUEST

PROPOSED CHANGE 1

Background:

During investigation of an Operating Experience (OE) Report #5366 concerning "preferred/standby" logic for Standby Gas Treatment System filtration trains, Technical Support System Engineers noted that although the Brunswick Plant Standby Gas Treatment System filtration trains do not use the "preferred/standby" logic configuration, the Control Building Heating, Ventilation, and Air Conditioning (CBHVAC) System emergency air filtration trains do utilize a "preferred/standby" logic configuration. The logic for the emergency air filtration trains was reviewed and revealed that previously unidentified single failures could occur (Reference Adverse Condition Report [ACR] 92-642) that would defeat the safety function of the system.

Other than normal ventilation and heating/cooling of the Control Building, the CBHVAC System must provide habitability during three different design basis events. The first concerns a radiation event (Main Steam Line Break [MSLB] or Loss of Coolant Accident [LOCA]). The second event concerns the complete rupture of the 55 ton chlorine tank car located near the Service Water Building. The third is a smoke intrusion event. These events form the basis of the Control Building Emergency Ventilation function (CBEVS) of the CBHVAC System.

In the MSLB or LOCA event the CBHVAC System is required to isolate and enter the Radiation Protection Mode on a Control Room Intake High Radiation signal from the Area Radiation Monitoring System. The high radiation signal closes the normal fresh air inlet, isolating the control room. At approximately the same time, an emergency air filtration unit begins operation, recirculating the control room air to minimize contamination build-up in the Control Room Envelope and providing filtered make-up air for pressurization. The system responds to a smoke event in the same manner it does for radiation.

In the event of a chlorine gas release, the CBHVAC System enters a Chlorine Protection (full recirculation) Mode, with no outdoor air intake (except for the battery rooms). The emergency filtration trains do not start since they do not effectively remove chlorine and may be damaged by the introduction of chlorine.

Problem Description:

The chlorine detection logic is designed "fail-safe" such that any failure (i.e. loss of power, detector failure, etc.) isolates the control room in the same manner as a true chlorine signal. The CBEVS is designed to meet the single failure criteria described in IEEE 279-1971 (ref.: UFSAR Section 9.4.1.3.c). The single active failure criterion referenced previously is satisfied for this system

except for 2L-D-CB, 2J-D-CB, 2H-D-CB, and SV-916. These exceptions have been previously accepted by the NRC. In contradiction to the above requirement and accepted exceptions, the following describes the single failure criteria concerns in the current system.

As discussed above, ACR 92-642 identified that, upon loss of power in the control logic of the CBEVS preferred train, the standby train does not start automatically as intended. This is due to a lack of a start signal upon loss of power. By original design, the system uses a 10 second timer to initiate a start signal to the standby train should the preferred train fail to start. On a loss of power to the preferred train, the 10 second timer is not energized and therefore an automatic start signal to the standby train is never sent. A plant test was initiated to verify system operation and demonstrate that, although the train would not automatically start, it could be manually started. The fuse providing control power to the A Train emergency filtration unit was removed. The B Train was then to be started by placing the control switch in the "ON" position. It was discovered that once the control power fuse was pulled, the CBHVAC System isolates. In addition, the B Train filtration unit was unable to be started manually.

It was determined that this failure is caused by the chlorine detection logic receiving its power from the A Train CBEVS control logic. By pulling the fuse for the A Train, the control power to the chlorine detection logic was lost, failing the logic in the "safe" position for a chlorine event. The "safe" position for the chlorine system is to isolate CBHVAC System and prevent or secure the operation of the emergency filtration units. This is done to prevent the intrusion of chlorine into the control room and the filtration units.

The actions which occur in the CBHVAC System as a result of a chlorine detection logic failure or chlorine accident are appropriate and meet the intent of Regulatory Guide 1.95 (Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release); however, should a radiological release event occur, concurrent with a single chlorine detection logic single failure, the CBHVAC would isolate as required but the emergency filtration units would not start (isolated by the chlorine single failure). This would result in an increase in operator doses for a radiological release event.

Problem Resolution:

The Brunswick Plant is implementing a plant modification (PM 92-108) to eliminate the single failures described above. The permanent resolution of the chlorine detection logic single failure input to the CBEVS is to provide a logic design which would not allow a single credible failure to disable the protective function of the CBEVS. In order to provide this design, a one-out-of-two-taken-twice logic is being utilized (Reference Figure 2). This design requires the addition of two (2) detectors per sampling location, forming two trip subsystems within each trip system (one trip system at the Control Building intake air plenum and one at the Service Water Intake Building near the chlorine tank car). The number of detectors utilized at each location increases from the present design of two to a total of four. The total number of detectors associated with the chlorine detection logic input to the CBEVS increases to eight.

The four detectors per sampling location (trip system) are being installed divisionalized such that two detectors are in Division I and two in Division II. The logic is designed such that two detectors (one per trip subsystem) at either location (trip system) will be required to sense chlorine in order to affect an isolation of the CBEVS. This design ensures that spurious detector isolations do not isolate the CBEVS, causing unnecessary operator actions, while still providing adequate chlorine gas protection by virtue of redundant detection systems. In addition, use of the one-out-of-two-taken-twice logic ensures that a loss of one division of power to the detectors will not place the

CBEVS in an isolated condition. This design concept also eliminates other single credible failures within the chlorine detection logic from isolating the CBEVS.

In order to prevent a loss-of-power on one division from isolating the CBEVS as a result of two chlorine detectors losing power, the chlorine detectors which, in the current design "fail-safe" (isolate on loss of power), are being replaced with detectors which do not isolate on loss of power. The new detectors are being installed in approximately the same locations as the existing detectors and will be purchased and installed to meet seismic qualification criteria.

To divisionalize the chlorine detection logic, the logic will now be fed from Division I and Division II of the CBEVS start logic. This divisionalization ensures that a loss-of-power on a complete division would not disable the protective function from a valid radiation and/or chlorine signal on the other division. New fuses will be installed to provide logic separation. These fuses will be analyzed to ensure that a failure in the non-safety related portion of the logic would not adversely affect the safety-related portion.

The new chlorine detectors use an amperometric sensor consisting of a platinum cathode and silver anode joined by an electrolytic salt bridge, all enclosed in a permeable membrane. This design eliminates the majority of the maintenance now required on the existing detectors. This design also eliminates the majority of operability concerns associated with the present potassium-iodine electrolyte "drip" type detectors. The detectors selected for use have been in service at several other nuclear facilities and have proven to be reliable.

The modification of the chlorine detection logic requires revision of the ACTION statements in the current Technical Specifications to reflect the increased number of detectors being installed in each detection trippsystem of the CBEVS. In addition, the SURVEILLANCE REQUIREMENTS of the CBEVS chlorine protection function are also being revised to reflect the new detectors.

Current Requirement:

The current LCO for the chlorine protection instrumentation requires one detection trip system located at the Control Room Air Intake and one detection trip system located near the chlorine tank car to be operable with the alarm/trip setpoint adjusted to alarm at a chlorine concentration of less than or equal to 5 ppm in ≤ 5 seconds.

The current configuration of the chlorine detection logic is shown in Figure 1. Each trip system consists of 2 detectors, with a one-out-of-two logic design. The detection system is not a single-failure proof design; however, each detector fails in a safe design configuration, resulting in isolation of the CBEVS. The current Technical Specifications reflect this design, with a 7-day ACTION statement for one chlorine detector of either or both trip systems being inoperable (loss of redundancy), and a requirement for isolation of the Control Room envelope within one hour with both detectors of either trip system inoperable (loss of function).

Proposed Change:

The LIMITING CONDITION FOR OPERATION, APPLICABILITY, and SURVEILLANCE REQUIREMENTS are being revised for the Chlorine Detection System Technical Specification 3/4.3.5.5.

The new LIMITING CONDITION FOR OPERATION will reflect the new trip subsystem within a trip system concept and the addition of four chlorine detectors. A 7-day LCO ACTION statement for one chlorine detector of either trip subsystem of either or both trip system(s) being inoperable (loss

of redundancy), and a requirement for isolation of the Control Room envelope within one hour with both detectors (one trip subsystem) of either trip system inoperable (loss of function) have been added to reflect this change. The proposed LCO ACTION statement out-of-service times remain the same for loss of redundancy and loss of function for the detection system as the current specification.

The APPLICABILITY section of the specification is being expanded to reflect an OPERATIONAL CONDITION requirement of any time the chlorine tank car is within the exclusion area.

The revised SURVEILLANCE REQUIREMENTS for the chlorine protection instrumentation reflect the new detection equipment. The CHANNEL CALIBRATION frequency is being changed from REFUELING to ANNUAL. The vendor recommends annual replacement of the sensors. A post calibration of the expended sensor and an installation calibration of the new sensor are to be conducted, including a complete channel calibration.

Basis:

The basis for the chlorine detection system is to provide automatic detection and initiation of protective actions in the Control Building Emergency Ventilation System.

The BASES Section of proposed Technical Specification 3.3.5.5 states that the OPERABILITY of the chlorine detection system ensures that an accidental chlorine release will be detected promptly and the necessary protective actions will be automatically initiated to provide protection for Control Room personnel. The BASES further state that upon detection of a high concentration of chlorine, the Control Room emergency ventilation system will automatically isolate the Control Room and operation will be initiated in the recirculation mode to provide the required protection.

As stated previously, the current chlorine detection/isolation configuration consists of two trip systems; one located at the intake of the CBHVAC System, and the other located near the chlorine tank car. Figures 1 and 2 provide simplified sketches of the current and modified chlorine detection and isolation logic for each trip system. The current instrumentation specification identifies actions necessary if one or both detectors of either trip system becomes inoperable (seven day LCO and one hour LCO ACTION statements).

The proposed change will not impact the requirement to maintain two detector trip systems operable. The proposed change is required to reflect the new configuration of the chlorine detection logic (i.e., trip subsystem within a trip system) and the additional number of detectors. The change also reflects the new equipment that has been selected to perform this function.

The new LIMITING CONDITION FOR OPERATION still requires that both trip systems remain operable to ensure that adequate Control Room personnel protection is maintained. The proposed LCO ACTION statement out-of-service time will remain the same for loss of redundancy and loss of function for the detection system.

The APPLICABILITY section of the specification is being expanded to reflect an OPERATIONAL CONDITION of any time the chlorine tank car is within the exclusion area. This ensures that Control Room personnel are adequately protected from a possible chlorine release event.

The new SURVEILLANCE REQUIREMENTS for the chlorine protection instrumentation will reflect the new detection equipment. The new chlorine detectors use an amperometric sensor consisting of a platinum cathode and silver anode joined by an electrolytic salt bridge, all enclosed in a

permeable membrane. This design eliminates the majority of the maintenance now required on the existing detectors; however, the manufacturer of the equipment recommends that the sensors be replaced approximately on an annual basis, depending on the specific climate of the facility. Discussions with other utilities support this replacement interval.

PROPOSED CHANGE 2

Background:

During a training review of the Brunswick Technical Specifications for the CBEVS, operations personnel noted a discrepancy in the APPLICABILITY requirements of the CBEVS specification for the OPERATIONAL CONDITIONS required for the system. ACR 91-524 was initiated to identify these discrepancies and determine the resolution of the issue. As a result, the Technical Specification changes proposed in the amendment have been developed. These changes preclude the need for a Technical Specification Interpretation to impose the system requirements.

Current Requirement:

The current license requirement for the Control Room Emergency Ventilation System, Specification 3.7.2, requires that two independent Control Room Emergency Air Filtration Systems be OPERABLE.

The current licensing requirement does not require OPERABILITY of the system during CORE ALTERATIONS, during movement of irradiated fuel assemblies in the secondary containment, or during operations with a potential for draining the reactor vessel. The current specification also does not define the various functions of the Control Building Emergency Ventilation System (i.e., the Radiation (Smoke) protection mode and the Chlorine Protection mode).

Proposed Change:

This proposed change adds OPERABILITY requirements for this system in the APPLICABILITY Section of Specification 3.7.2, and ACTION statements for each required mode of operation. The change also revises the LCO and adds an ACTION statement for operability of the Chlorine Protection function of the Emergency Ventilation System. This change eliminates the need for a Technical Specification Interpretation for Specification 3.7.2.

The new LIMITING CONDITION FOR OPERATION will add OPERABILITY requirements for Radiation and Smoke protection modes that include the present requirement to maintain two independent CBEAF systems OPERABLE. OPERABILITY requirements will also be added for the Chlorine Protection Mode as defined in 4.7.2.d.3 and in the Basis section of 3/4.7.2.

The new APPLICABILITY section will require OPERABILITY of the system during OPERATIONAL CONDITIONS 4 and 5, when activities which could result in a release of radiation could occur, including CORE ALTERATIONS, during movement of irradiated fuel assemblies in the secondary containment, and during operations with a potential for draining the reactor vessel in addition to OPERATIONAL CONDITIONS (1), (2), and (3). A special OPERATIONAL CONDITION is being added for the system during movement of irradiated fuel assemblies in the secondary containment.

New ACTION statements will be added to provide instructions if either or both Radiation Protection subsystems become inoperable during OPERATIONAL CONDITIONS 4 and 5 and during movement of irradiated fuel assemblies in the secondary containment.

New ACTION statements will also be added to provide instructions for inoperability of the Chlorine Protection Mode.

Basis:

The basis for the design of the Control Building Emergency Ventilation function of the CBHVAC System ensures that the control room will remain habitable for operations personnel during and following all credible external hazard event scenarios, e.g., a radiation event (Main Steam Line Break (MSLB) Accident, Refueling Accident, or Loss of Coolant Accident (LOCA)), a toxic gas event (complete rupture of the 55 ton chlorine tank car located near the Service Water Building), and an external smoke event.

The BASES Section of proposed Technical Specification 3/4.7.2 states that the OPERABILITY of the Control Room Emergency Ventilation System ensures that the Control Room will remain habitable for operations personnel during and following all credible external accident conditions (radiation, chlorine, and smoke). The operability of this system with respect to protection for radiation events is based on limiting the radiation exposure to personnel occupying the Control Room to 5 REM or less, whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criteria 19 of Appendix A, 10 CFR 50.

The new LIMITING CONDITION FOR OPERATION still requires that both CBEAF subsystems remain operable to ensure that the control room will remain habitable for operations personnel during and following all credible external hazard event scenarios, consistent with the assumptions in the various analyses. Two redundant subsystems of the CBEVS are required to be OPERABLE to ensure that at least one is available, assuming a single failure disables the other subsystem.

The Radiation Protection Mode of operation protects the control room operators from those events which may result in the release of radioactivity. The Radiation Protection Mode of operation also provides protection to the control room operators in the event of an external smoke intrusion event.

During a radiation event, the CBHVAC System is required to automatically isolate and enter the Radiation Protection Mode on a Control Room Intake High Radiation signal from the Area Radiation Monitoring System. Upon receipt of a high radiation signal, the CBHVAC System is automatically realigned to the emergency mode of operation. The normal fresh air inlet closes and, at approximately the same time, the emergency air filtration units begin operation, recirculating control room air and providing filtered makeup air to minimize contamination build-up and provide positive pressure in the Control Room Envelope. The CBHVAC System responds to an external smoke event in the same manner as it does for a radiation event.

In the event of a chlorine release, the CBHVAC System enters a full recirculation mode, with no outdoor air intake. The emergency filtration trains do not start, since they do not effectively remove chlorine and may be damaged by the presence of chlorine. Protection for chlorine gas events "overrides" any concurrent, ongoing, and any subsequent radiation or smoke initiation signals. The override design offers protection to operations personnel in the Control Room by providing protection against potentially fatal chlorine gas releases. This protection is required any time the chlorine tank car is within the exclusion area.

The APPLICABILITY section of the Specification is being expanded to include OPERATIONAL CONDITIONS 4 and 5 and during movement of irradiated fuel assemblies in the secondary containment. This APPLICABILITY ensures that the control room personnel are protected from those events which may result in the release of radioactivity. The ACTIONS associated with these OPERATIONAL CONDITIONS are consistent with the requirements of OPERATIONAL CONDITIONS 1, 2, and 3.

OPERABILITY of the Radiation Protection Mode of the CBEVS would be required during OPERATIONAL CONDITIONS 4 and 5 if the reactor coolant pressure boundary (RCPB) were significantly pressurized (i.e., at or above design pressure). This is based on pipe breaks only being postulated when pressures may exceed design pressures or due to brittle fracture (Reference 3, Section 15.0.3). Technical Specification requirements in Section 3.4.6.1 prevent the NDT limits being exceeded; therefore, a brittle fracture is not postulated. With respect to design pressure, no transients are postulated which could cause the RCPB design pressure to be exceeded (Reference 3, Section 5.2A). In addition, the Technical Specification definition of OPERATIONAL CONDITION 5 (Table 1.2) includes "with the vessel head closure bolts less than fully tensioned or with the head removed"; therefore, only deliberate pressurization (e.g., during hydrostatic testing) with blockage of the safety relief valves during OPERATIONAL CONDITION 4 could threaten the RCPB and thus require operability of the CBEVS. Procedural controls ensure that this condition would not be allowed.

The proposed LCO ACTION statement is not being changed for OPERATIONAL CONDITIONS 1, 2, and 3.

The proposed LCO ACTION statement allows operations to continue during OPERATIONAL CONDITIONS 4 and 5 and during movement of irradiated fuel assemblies in the secondary containment if one emergency filtration subsystem remains inoperable past the 7 day statement provided that the remaining subsystem is placed in service in the Radiation Protection Mode. This ensures that the remaining subsystem is OPERABLE, that no failures which could prevent automatic actuation will occur, and that any active failure would be readily detected.

An alternative to placing the remaining subsystem in service is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk and is consistent with the requirements of OPERATIONAL CONDITIONS (1), (2), and (3).

The proposed LCO ACTION statement with the Chlorine Protection Mode inoperable requires the chlorine tank car to be removed from the exclusion area within the next eight (8) hours. Chlorine gas protection is not required with the tank car outside of the exclusion area. Eight hours is considered adequate time to allow plant personnel to remove the chlorine tank car from the site in an orderly manner. With the plant physically unable to take the ACTION required by this statement, the proposed change requires the plant to take actions to place the plant in a condition that minimizes risk.

PROPOSED CHANGE 3

Background:

As a result of the changes required by Items 1 and 2 above, it was identified that additional changes were needed in the CBEVS Instrumentation Specification. This proposed change also revises the CBEVS Instrumentation specification to a table format more consistent with other instrumentation specifications.

Current Requirement:

The current license requirement for the Chlorine Detection Instrumentation is for one detection subsystem located at the Control Room Air Intake and one detection subsystem located near the chlorine tank car to be OPERABLE with the alarm/trip setpoint adjusted to alarm at a chlorine concentration of less than or equal to 5 ppm in ≤ 5 seconds.

The current instrumentation specification does not contain any radiation or smoke protection instrumentation requirements for the Control Building Emergency Ventilation System.

Proposed Change:

This proposed change adds Radiation Protection and External Smoke Protection instrumentation associated with the Control Building Emergency Ventilation System to the existing Chlorine Detection Specification (3/4.3.5.5) and renames the Section, Control Building Emergency Ventilation System Instrumentation. The instrument specification is also being reformatted into a table format, similar to other instrumentation specifications. The change eliminates the need for a Technical Specification Interpretation for Specification 3/4.3.5.5 which would be required to clarify the OPERABILITY of the CBEVS when a Chlorine Protection instrument is inoperable.

The new LIMITING CONDITION FOR OPERATION will add OPERABILITY requirements for the Radiation Protection and External Smoke Protection instrumentation associated with the Control Building Emergency Ventilation System and reformat the existing requirements into a table to be consistent with other Technical Specification Instrumentation.

The new APPLICABILITY section will require OPERABILITY of the Chlorine Detection Instrumentation any time the chlorine tank car is in the exclusion area. It will also require OPERABILITY of Radiation Protection and Smoke Detection Instrumentation consistent with the system level requirement.

ACTION statements are being added to provide address inoperable chlorine detectors. ACTION statements are also being added to provide instructions if a radiation or smoke detector becomes inoperable.

Basis:

The basis for the design of the Control Building Emergency Ventilation function ensures that the Control Room remains habitable during and following all credible external hazard event scenarios, e.g., a radiation event (Main Steam Line Break [MSLB] Accident, Refueling Accident, or Loss of

Coolant Accident (LOCA), a toxic gas event (complete rupture of the 55 ton chlorine tank car located near the Service Water Building), and an external smoke event.

The present license requirement to maintain two chlorine detection trip systems OPERABLE is not being affected by this change. The current license requirement for the chlorine detection instrumentation is being expanded to include requirements for Radiation Protection and External Smoke Protection Instrumentation and is being renamed Control Building Emergency Ventilation System Instrumentation. These instrumentation requirements are presently included in the current license in Technical Specification 4.7.2.d. The instrument requirement is consistent with the current license requirement, will clarify OPERABILITY requirements, and eliminates the need for a Technical Specification Interpretation for Specification 3/4.3.5.5.

PROPOSED CHANGE 4

Background:

During reviews of the proposed changes for Items 1 and 2 above, an inconsistency was noted in the in-place acceptance criteria of the CBEVS surveillance requirements. This change eliminates the discrepancy and ensures that the assumptions in the control room habitability analysis remain valid.

Current Requirement:

SURVEILLANCE REQUIREMENT 4.7.2.b.1 requires that the Control Room Emergency Air Filtration Systems be demonstrated OPERABLE by verifying that the cleanup system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c., and C.5.d of Regulatory Guide 1.52, Revision 1, July 1976, and the system flow rate is 2000 cfm \pm 10 percent.

Proposed Change:

The current specification refers to Regulatory Guide 1.52, Revision 1 in-place testing acceptance criteria, which implies that a filtration efficiency of \geq 99.95 percent would be required for the Brunswick Plant CBEVS filtration units. Specifications 4.7.2.e and 4.7.2.f require a filtration efficiency of \geq 99 percent. This change amends the specific efficiency of Specification 4.7.2.b.1 to be consistent with Surveillance Requirements 4.7.2.e and f and the guidance of Generic Letter 83-13.

Basis:

The basis of this requirement is to verify the capability of the system on a periodic basis or when work has been performed that may affect the operability or efficiency of the filtration system. The current Specification refers to Regulatory Guide 1.52 in-place testing acceptance criteria which specify an efficiency of \geq 99.95 percent; however, Regulatory Guide 1.52 further states that a filtration efficiency of \geq 99.95 percent allows a credit of up to 99 percent efficiency for the dose analyses. Generic Letter 83-13 provided a clarification of the removal efficiency requirements of

Regulatory Guide 1.52. The Generic Letter states that an in-place testing acceptance criteria removal efficiency of ≥ 99 percent is required if the assumptions used by the NRC staff in the Safety Evaluation for the system removal efficiency are ≤ 95 percent. The maximum efficiency assumed in the Brunswick Plant habitability analyses is 95 percent; therefore, an in-place testing efficiency of ≥ 99 percent would provide an acceptable margin of safety to ensure system capability.

PROPOSED CHANGE 5

Background:

During reviews of the proposed changes for Items 1 and 2 above, an inconsistency was noted in Specification 4.7.2.d.1 concerning the pressure drop across the combined HEPA filters and charcoal adsorber banks currently allowed by the CBEVS surveillance specification. This change corrects the discrepancy to be consistent with the system pressure drop calculation.

Current Requirement

SURVEILLANCE REQUIREMENT 4.7.2.D.1 requires that the Control Room Emergency Air Filtration Systems be demonstrated OPERABLE by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 8.5 inches water gauge while operating the filter train at a flow rate of $2000 \text{ cfm} \pm 10$ percent. The purpose of the maximum filter pressure drop is to ensure that the system is capable of delivering rated flow rate with a 1 inch water gauge margin for filter loading.

Proposed Change:

The proposed change to SURVEILLANCE REQUIREMENT 4.7.2.d decreases the maximum allowable pressure drop across the combined HEPA filters and charcoal adsorber banks to ≤ 5.25 inches water gauge while operating the filter train at a flow rate of $2000 \text{ cfm} \pm 10$ percent.

Basis:

The proposed change revises the maximum allowable pressure drop across the filtration train. The current specification allows a pressure drop of 8.5 inches of water gauge. Analyses have shown that the system fan is not capable of developing the required flow at a pressure drop of 8.5 inches of water gauge. SURVEILLANCE REQUIREMENT 4.7.2.d is being revised to lower the maximum allowable pressure drop across the combined HEPA filters and charcoal adsorber banks to less than or equal to 5.25 inches water gauge, while operating the filter train at a flow rate of $2000 \text{ cfm} \pm 10$ percent. This criteria ensures that the required flow rate can be met with margin for filter loading.

FIGURE 1
 CONTROL BUILDING EMERGENCY
 VENTILATION SYSTEM
 CHLORINE DETECTION/ISOLATION LOGIC
 EXISTING CONFIGURATION

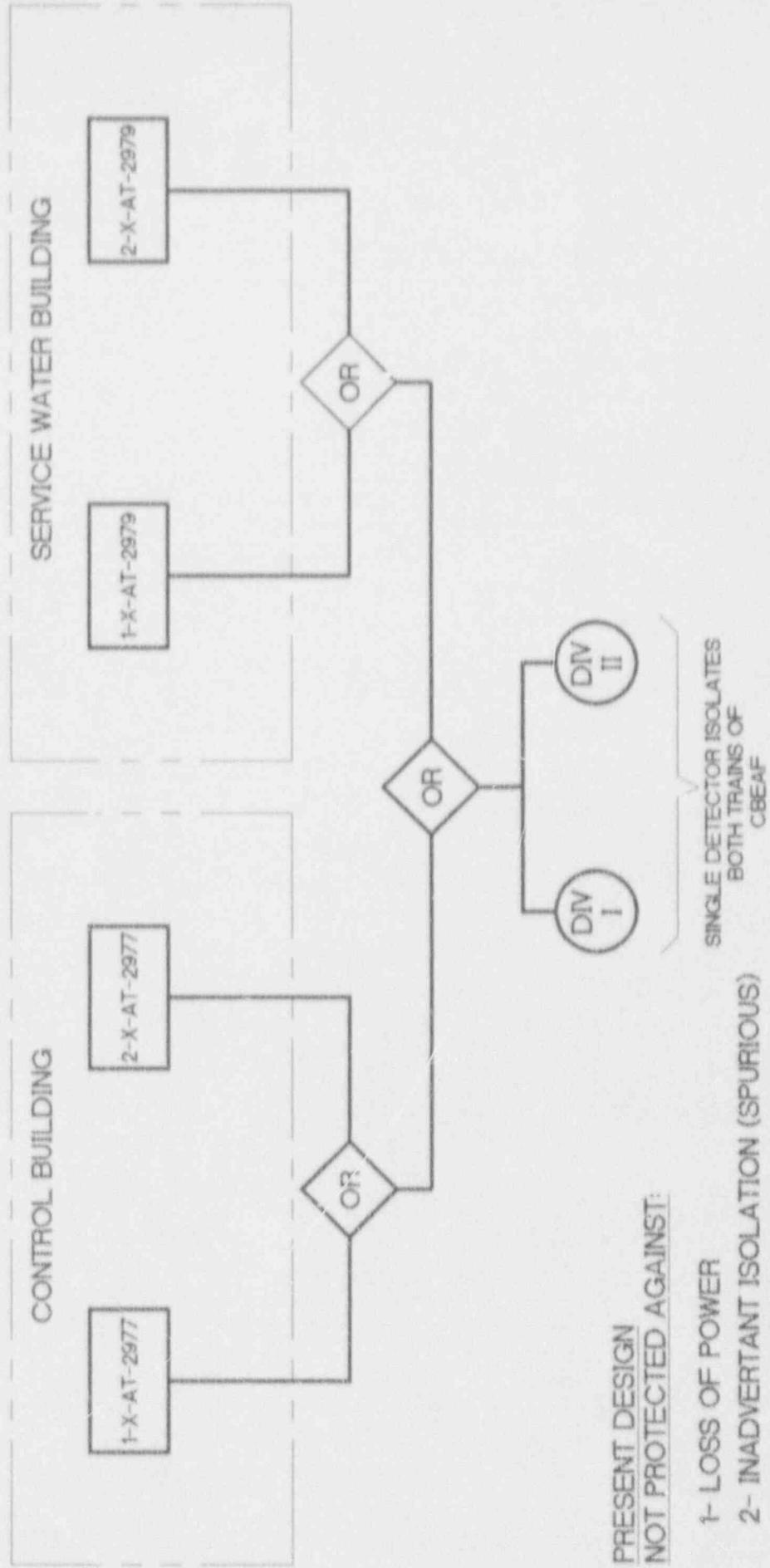
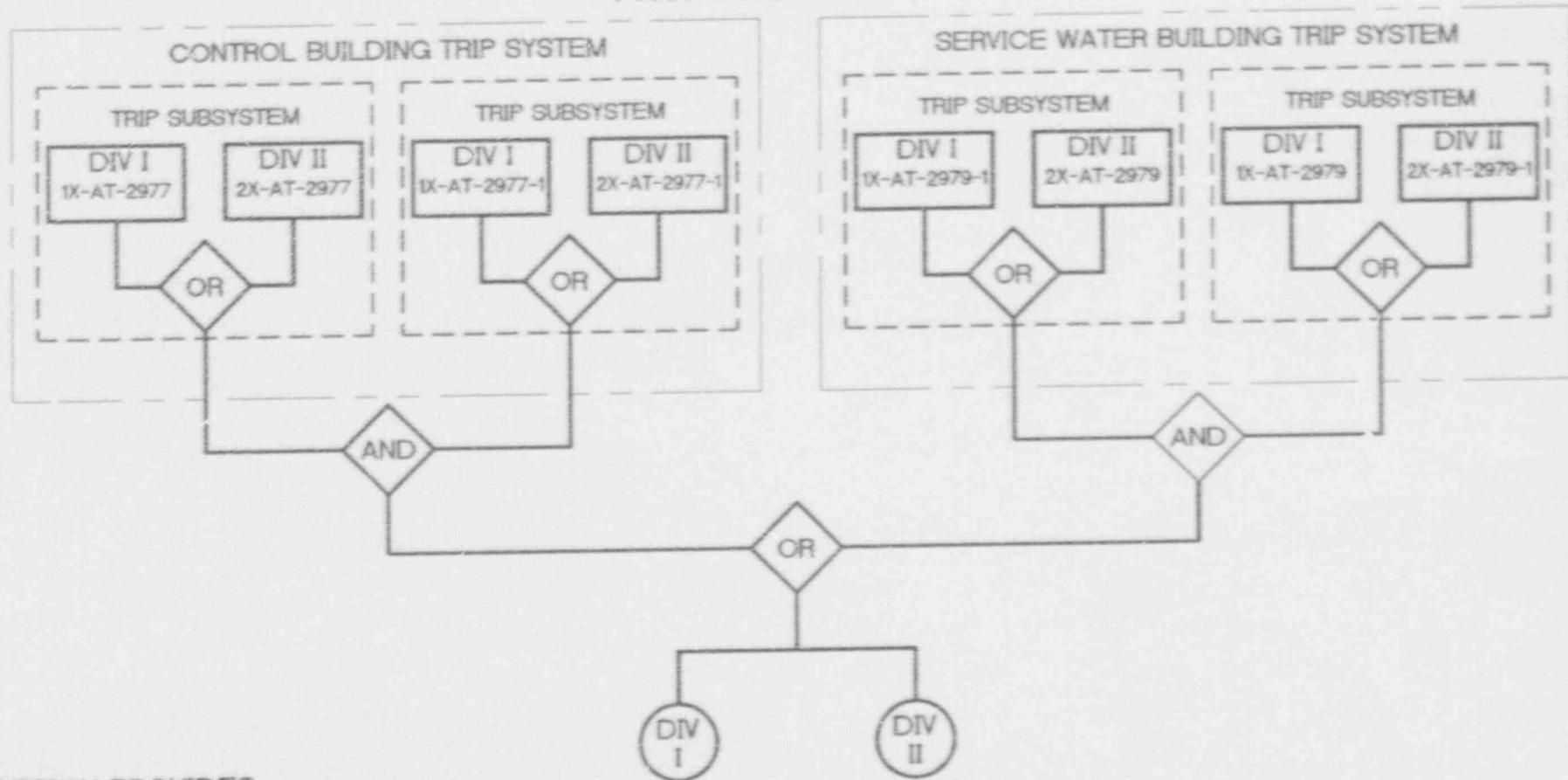


FIGURE 2
 CONTROL BUILDING EMERGENCY
 VENTILATION SYSTEM
 CHLORINE DETECTION/ISOLATION LOGIC
 PROPOSED CHANGE



DESIGN PROVIDES
 PROTECTION AGAINST:

- 1- LOSS OF DIVISIONAL POWER
- 2- INADVERTANT ISOLATION (SPURIOUS)
- 3- SINGLE COMPONENT FAILURE
- 4- FAILURE TO DETECT CL_2

EACH ISOLATES
 BOTH TRAINS OF
 CBEAF

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
CONTROL BUILDING EMERGENCY AIR FILTRATION SYSTEM
(NRC TAC NOS. M85143 AND M85144)

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. 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 1:

The LIMITING CONDITION FOR OPERATION, APPLICABILITY, and SURVEILLANCE REQUIREMENTS are being revised for the Chlorine Detection System Technical Specification 3/4.3.5.5.

The new LIMITING CONDITION FOR OPERATION will reflect the new trip subsystem within a trip system concept and the addition of four chlorine detectors. A 7-day LCO ACTION statement for one chlorine detector of either trip subsystem of either or both trip system(s) being inoperable (loss of redundancy), and a requirement for isolation of the Control Room envelope within one hour with both detectors (one trip subsystem) of either trip system inoperable (loss of function) have been added to reflect this change. The proposed LCO ACTION statement cut-of-service times remain the same for loss of redundancy and loss of function for the detection system as the current specification.

The APPLICABILITY section of the specification is being expanded to reflect an OPERATIONAL CONDITION requirement of any time the chlorine tank car is within the exclusion area.

The revised SURVEILLANCE REQUIREMENTS for the chlorine protection instrumentation reflect the new detection equipment. The CHANNEL CALIBRATION frequency is being changed from REFUELING to ANNUAL. The vendor recommends annual replacement of the sensors. A post calibration of the expanded sensor and an installation calibration of the new sensor are to be conducted, including a complete channel calibration.

Basis for Proposed Change 1:

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. The change does not affect any of the chlorination system piping system or tank car, which would be the initiating components of a chlorine release event; therefore the probability of a chlorine tank car rupture analyzed in UFSAR Section 6.4.4.2 will not be increased.

This proposed change maintains the existing OPERABILITY requirements for the Chlorine Isolation Instrumentation and the same ACTION statements for loss of redundancy and loss of function of the system. No additional assumptions in the chlorine tank car rupture analyzed in UFSAR section 6.4.4.2 are introduced or accepted by this change. Therefore there are no increases in the consequences of a chlorine tank car rupture or of any previously evaluated Chapter 15 design basis accidents.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed change is required to reflect Chlorine Detection System configuration changes so that previously unidentified single failures will be eliminated. The proposed change imposes the same OPERABILITY requirements as the existing configuration as well as the same ACTION statements for loss of function and loss of redundancy. Since the detection/isolation components will continue to operate as required and previously unidentified single failures are being eliminated, the proposed change does not create the possibility of an accident of a new or different kind than previously evaluated in the Safety Analysis Report.
3. The proposed amendment does not involve a significant reduction in the margin of safety. The proposed change to reflect the new configuration of the Chlorine Isolation Instrumentation trip systems and the addition of chlorine detectors does not change any safety settings. The assumptions of the chlorine tank car rupture analyzed in UFSAR 6.4.4.2 are unchanged; therefore, the results of the analysis remain within the NRC acceptance criteria. The change in surveillance to reflect the new type of sensor will not reduce the reliability of the detection system. Therefore, the proposed change does not involve any reduction in the margin of safety.

Proposed Change 2:

This proposed change adds OPERABILITY requirements for this system in the APPLICABILITY Section of Specification 3.7.2, and ACTION statements for each required mode of operation. The change also revises the LCO and adds an ACTION statement for operability of the Chlorine Protection function of the Emergency Ventilation System. This change eliminates the need for a Technical Specification Interpretation for Specification 3.7.2.

The new LIMITING CONDITION FOR OPERATION will add OPERABILITY requirements for Radiation and Smoke protection modes that include the present requirement to maintain two independent CBEAF systems OPERABLE. OPERABILITY requirements will also be added for the Chlorine Protection Mode as defined in 4.7.2.d.3 and in the Basis section of 3/4.7.2.

The new APPLICABILITY section will require OPERABILITY of the system during OPERATIONAL CONDITIONS 4 and 5, when activities which could result in a release of radiation could occur, including CORE ALTERATIONS, during movement of irradiated fuel assemblies in the secondary containment, and during operations with a potential for draining the reactor vessel in addition to OPERATIONAL CONDITIONS (1), (2), and (3). A special OPERATIONAL CONDITION is being added for the system during movement of irradiated fuel assemblies in the secondary containment.

New ACTION statements will be added to provide instructions if either or both Radiation Protection subsystems becomes inoperable during OPERATIONAL CONDITIONS 4 and 5 and during movement of irradiated fuel assemblies in the secondary containment.

New ACTION statements will also be added to provide instructions for inoperability of the Chlorine Protection Mode.

Basis for Proposed Change 2:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The present LCO requirement to maintain two independent Control Room Emergency Air Filtration Systems OPERABLE is not being affected by this change, therefore the probability of Chapter 15 accidents applicable to this license requirement (Main Steam Line Break (MSLB) and the Loss of Coolant Accident (LOCA) are the most limiting) will not be increased. The additional OPERABILITY requirements for the system during OPERATIONAL CONDITIONS 4 and 5 and during movement of irradiated fuel assemblies in the secondary containment will be the same as in OPERATIONAL CONDITIONS 1, 2, and 3. These requirements were added to ensure that the Control Room will remain habitable for operations personnel during and following all credible accident conditions (e.g., Fuel Handling Accidents) that are applicable during these operational conditions. Since the requirements to operate in the Radiation Protection Mode or to suspend such operations are consistent with the present license requirements, the probability of these accidents will not be increased by this change.

The present license requirement to maintain two independent Control Room Emergency Air Filtration Systems OPERABLE is the same for OPERATIONAL CONDITIONS 1, 2, and 3; therefore the consequences associated with a Main Steam Line Break (MSLB) or a Loss of Coolant Accident (LOCA) are not increased. The addition of the OPERABILITY requirements for the system during OPERATIONAL CONDITIONS 4 and 5 and during movement of irradiated fuel assemblies in the secondary containment ensures that the doses to the control room operators are reduced for accidents during which the total radiological releases are less than the design basis accidents consistent with the assumptions in the habitability analyses; therefore, the consequences of any previously evaluated accidents are not increased by this change.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The additional OPERABILITY requirements to the Control Building Ventilation System are consistent with the OPERABILITY requirements during OPERATIONAL CONDITIONS 1, 2, and 3. The proposed change does not introduce any new modes of plant operation or create any new credible single failure. The clarification of the Chlorine Protection Mode eliminates the need for Technical Specification Interpretation for Specification 3.7.2 and does not introduce any new modes of plant operation. Therefore, the proposed change does not create the possibility of an

accident of a new or different kind than previously evaluated in the Safety Analysis Report.

3. The proposed amendment does not involve a significant reduction in the margin of safety. The additional OPERABILITY requirements to the Control Building Ventilation System are consistent with the OPERABILITY requirements during OPERATIONAL CONDITIONS 1, 2, and 3 and do not reduce any margin of safety or have any impact on 10 CFR 50, Appendix A, General Design Criterion 19 limits. The clarification of the Chlorine Protection Mode eliminates the need for a Technical Specification Interpretation to Specification 3.7.2 and, therefore, does not reduce any margin of safety.

Proposed Change 3:

This proposed change adds Radiation Protection and External Smoke Protection instrumentation associated with the Control Building Emergency Ventilation System to the existing Chlorine Detection Specification (3/4.3.5.5) and renames the Section, Control Building Emergency Ventilation System Instrumentation. The instrument specification is also being reformatted into a table format, similar to other instrumentation specifications. The change eliminates the need for a Technical Specification Interpretation for Specification 3/4.3.5.5 which would be required to clarify the OPERABILITY of the CBEVS when a Chlorine Protection instrument is inoperable.

The new LIMITING CONDITION FOR OPERATION will add OPERABILITY requirements for the Radiation Protection and External Smoke Protection instrumentation associated with the Control Building Emergency Ventilation System and reformat the existing requirements into a table to be consistent with other Technical Specification Instrumentation.

The new APPLICABILITY section will require OPERABILITY of the Chlorine Detection Instrumentation any time the chlorine tank car is in the exclusion area. It will also require OPERABILITY of Radiation Protection and Smoke Detection Instrumentation consistent with the system level requirement.

New ACTION statements will be added to provide instructions if either chlorine detector within a trip system or either trip system within a subsystem becomes inoperable. ACTION statements are also being added to provide instructions if a radiation or smoke detector becomes inoperable.

Basis for Proposed Change 3:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The change does not affect any of the chlorination system piping system or tank car, which would be the initiating components of a chlorine release event; therefore the probability of a chlorine tank car rupture analyzed in UFSAR Section 6.4.4.2 will not be increased. The current license requirement for Chlorine detection instrumentation is being expanded to include requirements for Radiation Protection and External Smoke Protection Instrumentation and is being renamed Control Building Emergency Ventilation System (CBEVS) Instrumentation. These instruments are only involved in the mitigation of CBEVS design basis events and are not involved in the initiation of any design basis event for the CBEVS System; therefore, the changes to these instruments will not increase the probability of the Chapter 15 accidents discussed in Proposed Change 2 above that are applicable to this system.

The addition of Radiation and External Smoke Protection instrumentation requirements associated with the Control Building Emergency Ventilation System to the existing Chlorine Detection Specification does not change any OPERATIONAL requirements of any existing system, nor does it alter any assumptions used in the previously evaluated Chapter 15 MSLB, LOCA, or Refueling accidents. The requirements for the instruments input function to the CBEAF already exist. Therefore, the consequences of any of these Chapter 15 accidents are not increased by this proposed change.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The addition of Radiation and External Smoke Protection instrumentation requirements associated with the Control Building Emergency Ventilation System to the existing Chlorine Detection Specification does not change any mode of operation of the Control Building Emergency Ventilation System or introduce any credible single failure to the plant system or instrumentation associated with this change. The change will eliminate the need for a Technical Specification Interpretation for Specification 3.3.5.5. Therefore, the proposed change does not create the possibility of an accident of a new or different kind than previously evaluated in the Safety Analysis Report.
3. The proposed amendment does not involve a significant reduction in the margin of safety. The addition of Radiation and External Smoke Protection instrumentation requirements associated with the Control Building Emergency Ventilation System to the existing Chlorine Detection Specification does not reduce any margin of safety. The instrumentation function inputs to the Control Building Emergency Ventilation System already exist in Technical Specification 3/4.7.2. The change will eliminate the need for a Technical Specification Interpretation for Specification 3.3.5.5. Therefore, the proposed change does not involve any reduction in the margin of safety.

Proposed Change 4:

The current specification refers to Regulatory Guide 1.52, Revision 1 in-place testing acceptance criteria, which implies that a filtration efficiency of ≥ 99.95 percent would be required for the Brunswick Plant CBEVS filtration units. Specifications 4.7.2.e and 4.7.2.f require a filtration efficiency of ≥ 99 percent. This change amends the specific efficiency of Specification 4.7.2.b.1 to be consistent with Surveillance Requirements 4.7.2.e and f and the guidance of Generic Letter 83-13.

Basis for Proposed Change 4:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The equipment impacted by this change is not involved in the initiation of any design basis event which requires a protective action response by the CBEVS System; therefore, the probability of occurrence of any accident previously evaluated is not increased by this change.

The efficiency requirements added to this Surveillance Requirement are consistent the current requirements of 4.7.2.e and f and remain bounded by the maximum efficiency assumed in the habitability analyses which ensure that no General Design Criteria Limits will be exceeded. Therefore, the consequences of a Chapter 15 analyzed radiation event will not be increased.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The efficiency requirements added to this Surveillance Requirement are consistent with the current license requirements and do not impose any different or additional operating requirements on the system. No credible single failures are being introduced by this change. Therefore, the proposed change does not create the possibility of an accident of a new or different kind than previously evaluated in the Safety Analysis Report.
3. The proposed amendment does not involve a significant reduction in the margin of safety. A specific efficiency requirement is being added to SURVEILLANCE REQUIREMENT 4.7.2.b that is consistent with existing SURVEILLANCE REQUIREMENTS 4.7.2.e and f and meets the guidance of Generic Letter 83-13. The maximum efficiency assumed in the habitability analyses contained in the NRC staff Safety Evaluations for the Brunswick Plant CBEVS filtration units is 95 percent. The proposed change of greater than or equal to 99 percent efficiency ensures that the assumptions in the NRC staff evaluations remain bounded; therefore, the proposed change does not involve any reduction in the margin of safety.

Proposed Change 5:

The proposed change to SURVEILLANCE REQUIREMENT 4.7.2.d decreases the maximum allowable pressure drop across the combined HEPA filters and charcoal adsorber banks to ≤ 5.25 inches water gauge while operating the filter train at a flow rate of 2000 cfm ± 10 percent.

Basis for Proposed Change 5:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The equipment impacted by this change is not involved in the initiation of any design basis event which requires a protective action response by the CBEVS System; therefore, the probability of occurrence of any accident previously evaluated is not increased by this change.

The current license requirement to ensure that the filtration train is capable of delivering the required flow rate with filter loading will not be impacted by this change. The revised maximum allowable pressure drop remains bounded by the existing requirement, as demonstrated by the pressure drop calculation. Therefore, the consequences of a Chapter 15 analyzed radiation event will not be increased.
2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The revised maximum allowable pressure drop across the filtration system ensures that the system will deliver the required flow rate with margin for filter loading following an accident. The proposed change ensures that the system will perform its intended design function and poses no additional operating modes or new credible single failures. Therefore, the proposed change does not create the possibility of an accident of a new or different kind than previously evaluated in the Safety Analysis Report.
3. The proposed amendment does not involve a significant reduction in the margin of safety. The proposed change to revise the maximum allowable pressure drop across the filtration train to less than or equal to 5.25 inches of water, gauge, ensures that the required flow rate can be met with margin for filter loading following an accident. The revised maximum

limit remains bounded by the existing requirement; therefore, the proposed change does not involve any 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
CONTROL BUILDING EMERGENCY AIR FILTRATION SYSTEM
(NRC TAC NOS. M85143 AND M85144)

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 CHANGES:

Proposed Change 1:

The LIMITING CONDITION FOR OPERATION, APPLICABILITY, and SURVEILLANCE REQUIREMENTS are being revised for the Chlorine Detection System Technical Specification 3/4.3.5.5.

The new LIMITING CONDITION FOR OPERATION will reflect the new trip subsystem within a trip system concept and the addition of four chlorine detectors. A 7-day LCO ACTION statement for one chlorine detector of either trip subsystem of either or both trip system(s) being inoperable (loss of redundancy), and a requirement for isolation of the Control Room envelope within one hour with both detectors (one trip subsystem) of either trip system inoperable (loss of function) have been added to reflect this change. The proposed LCO ACTION statement out-of-service times remain the same for loss of redundancy and loss of function for the detection system as the current specification.

The APPLICABILITY section of the specification is being expanded to reflect an OPERATIONAL CONDITION requirement of any time the chlorine tank car is within the exclusion area.

The revised SURVEILLANCE REQUIREMENTS for the chlorine protection instrumentation reflect the new detection equipment. The CHANNEL CALIBRATION frequency is being changed from REFUELING to ANNUAL. The vendor recommends annual replacement of the sensors. A post calibration of the expended sensor and an installation calibration of the new sensor are to be conducted, including a complete channel calibration.

Proposed Change 2:

This proposed change adds OPERABILITY requirements for this system in the APPLICABILITY Section of Specification 3.7.2, and ACTION statements for each required mode of operation. The change also revises the LCO and adds an ACTION statement for operability of the Chlorine Protection function of the Emergency Ventilation System. This change eliminates the need for a Technical Specification Interpretation for Specification 3.7.2.

The new LIMITING CONDITION FOR OPERATION will add OPERABILITY requirements for Radiation and Smoke protection modes that include the present requirement to maintain two independent CBEAF systems OPERABLE. OPERABILITY requirements will also be added for the Chlorine Protection Mode as defined in 4.7.2.d.3 and in the Basis section of 3/4.7.2.

The new APPLICABILITY section will require OPERABILITY of the system during OPERATIONAL CONDITIONS 4 and 5, when activities which could result in a release of radiation could occur, including CORE ALTERATIONS, during movement of irradiated fuel assemblies in the secondary containment, and during operations with a potential for draining the reactor vessel in addition to OPERATIONAL CONDITIONS 1, 2, and 3. A special OPERATIONAL CONDITION is being added for the system during movement of irradiated fuel assemblies in the secondary containment.

New ACTION statements will be added to provide instructions if either or both subsystems becomes inoperable during OPERATIONAL CONDITIONS 4 and 5 and during movement of irradiated fuel assemblies in the secondary containment.

New ACTION statements will also be added to provide instructions for inoperability of the Chlorine Protection Mode.

Proposed Change 3:

This proposed change adds Radiation Protection and External Smoke Protection instrumentation associated with the Control Building Emergency Ventilation System to the existing Chlorine Detection Specification (3/4.3.5.5) and renames the Section, Control Building Emergency Ventilation System Instrumentation. The instrument specification is also being reformatted into a table format, similar to other instrumentation specifications. The change eliminates the need for a Technical Specification Interpretation for Specification 3/4.3.5.5 which would be required to clarify the OPERABILITY of the CBEVS when a Chlorine Protection instrument is inoperable.

The new LIMITING CONDITION FOR OPERATION will add OPERABILITY requirements for the Radiation Protection and External Smoke Protection instrumentation associated with the Control Building Emergency Ventilation System and reformat the existing requirements into a table to be consistent with other Technical Specification Instrumentation.

The new APPLICABILITY section will require OPERABILITY of the Chlorine Detection Instrumentation any time the chlorine tank car is in the exclusion area. It will also require OPERABILITY of Radiation Protection and Smoke Detection Instrumentation consistent with the system level requirement.

New ACTION statements will be added to provide instructions if either chlorine detector within a trip system or either trip system within a subsystem becomes inoperable. ACTION statements are also being added to provide instructions if a radiation or smoke detector becomes inoperable.

Proposed Change 4:

The current specification refers to Regulatory Guide 1.52, Revision 1 in-place testing acceptance criteria, which implies that a filtration efficiency of ≥ 99.95 percent would be required for the Brunswick Plant CBEVS filtration units. Specifications 4.7.2.e and 4.7.2.f require a filtration efficiency of ≥ 99 percent. This change amends the specific efficiency of Specification 4.7.2.b.1 to be consistent with Surveillance Requirements 4.7.2.e and f and the guidance of Generic Letter 83-13.

Proposed Change 5:

The proposed change to SURVEILLANCE REQUIREMENT 4.7.2.d decreases the maximum allowable pressure drop across the combined HEPA filters and charcoal adsorber banks to ≤ 5.25 inches water gauge while operating the filter train at a flow rate of $2000 \text{ cfm} \pm 10$ percent.

Basis for Proposed Changes:

The proposed changes meet 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. The changes being made only ensure that the mitigative functions of the CBEVS are consistent with those assumed in the habitability analyses. As such, the changes can not 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. The changes being made only ensure that the mitigative functions of the CBEVS are consistent with those assumed in the habitability analyses. Therefore, the proposed changes would have no effect on either individual or cumulative occupational radiation exposure.