

PLANT SYSTEMS

3/4.7.7 AUXILIARY BUILDING EXHAUST AIR FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7.1 At least one Auxiliary Building exhaust air HEPA filter train, associated with the one charcoal adsorber bank, and at least two exhaust fans shall be OPERABLE. e

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With the above required HEPA filter train inoperable, restore the HEPA filter train to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With the charcoal adsorber bank inoperable, restore the charcoal adsorber bank to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With only one exhaust fan OPERABLE, restore at least two exhaust fans to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS.

4.7.7.1 The above required Auxiliary Building exhaust air filtration system shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the filter train and each fan operate for at least 15 minutes.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system, by:

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The OPERABILITY of this system in conjunction with control room design provisions 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 Criterion 19 of Appendix "A", 10 CFR 50.

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The OPERABILITY of the auxiliary building exhaust air filtration system ensures that radioactive materials leaking from the ECCS equipment following a LOCA are filtered prior to reaching the environment. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the accident analyses. ANSI N510-1975 should be used as a procedural guideline for surveillance testing.

3/4.7.8 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

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LIMITING CONDITION FOR OPERATION

3.7.7 At least one Auxiliary Building exhaust air HEPA filter train, associated with the one charcoal adsorber bank, and at least two exhaust fans shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With the above required HEPA filter train inoperable, restore the HEPA filter train to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With the charcoal adsorber bank inoperable, restore the charcoal adsorber bank to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With only one exhaust fan OPERABLE, restore at least two exhaust fans to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.7 The above required Auxiliary Building exhaust air filtration system shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the filter train and each fan operate for at least 15 minutes.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system, by:

ATTACHMENT 1
LR. N990363

PLANT SYSTEMS

BASES

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The OPERABILITY of this system in conjunction with control room design provisions 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 Criterion 19 of Appendix "A", 10 CFR Part 50.

3/4.7.7 AUXILIARY BUILDING EXHAUST AIR FILTRATION SYSTEM

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The flowrates specified for surveillance testing correspond to the maximum design flow for the charcoal adsorber. This is the limiting condition for system performance under accident conditions. Testing at this flow assures that the charcoal adsorber removal efficiency, and the system bypass leakage are within the assumed values of the accident analysis. Operation at lower flowrates is conservative with respect to the accident analysis assumptions.

3/4.7.8 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

Sealed sources are classified into three groups according to their use, with surveillance requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism (i.e., sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

ATTACHMENT II
LR-N990363
SALEM GENERATING STATION UNITS 1 AND 2
FACILITY OPERATING LICENSE NOS. DPR-70 AND DPR-75
DOCKET NOS. 50-272 AND 50-311
AUXILIARY BUILDING VENTILATION SYSTEM (ABVS)

10CFR50.92 EVALUATION

Public Service Electric & Gas (PSE&G) has concluded that the proposed changes to the Salem Generating Station Units 1 and 2 TS do not involve a significant hazard. In support of this determination, an evaluation of each of the three standards set forth in 10CFR50.92 is provided below.

REQUESTED CHANGE

This submittal provides explicit requirements for the ABVS to be considered operable consistent with "Standard Technical Specifications Westinghouse Plants" NUREG 1431, Revision 1 (ITS) and applicable Bases. Specifically, it will:

- ◆ Require two Auxiliary Building Ventilation System (ABVS) supply fans to be operable.
- ◆ Require three ABVS exhaust fans to be operable.
- ◆ Clarify the TS Bases.

BASIS

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

The proposed change alters the number of fans which must be OPERABLE to ensure that a sufficient number of supply and exhaust fans will be operable, following a most limiting single failure, to mitigate the consequences of design basis accidents. The changes to the ABVS surveillance requirements still provide an appropriate means for demonstrating the operability of the ABVS.

The ABVS cannot initiate or otherwise cause any accident or operational transient evaluated in the UFSAR. Consequently, the probability of such events is not increased. The ABVS cannot increase the consequences of a design basis LOCA unless: 1) Auxiliary Building negative pressure is lost, resulting in uncontrolled, ground level release of radioactive material; 2) ABVS carbon adsorbers are bypassed, resulting in uncontrolled release of radioactive iodine from the plant vent; or 3) Auxiliary Building temperatures are not controlled, resulting in failure of accident mitigating equipment.

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By requiring OPERABILITY of all ABVS supply and exhaust fans, the proposed changes contained in this submittal assure Auxiliary Building negative pressure is maintained under all postulated post-accident, single-failure scenarios. The proposed changes to ABVS will not affect the elemental iodine adsorption capability of the system. Finally, engineering analyses conclude that these fan combinations, with single-active failures of the fans or their support systems considered, provide sufficient Auxiliary Building ventilation. Under the most limiting temperature conditions, the fans will maintain room temperatures within design limits. Accordingly, the consequences of a design basis LOCA, hence applicable design basis accidents or operational transients, are not increased.

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

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

ABVS supply fans are not considered essential to the primary safety-function of preventing or mitigating radioactive releases, nor are they currently required to be OPERABLE. Similarly, accident analyses take no credit for operation of supply fans. Accordingly, malfunctions of vital buses and ABVS exhaust fans are the only malfunctions of active ABVS related equipment important to safety that are previously evaluated.

The probability of failure of a vital bus is not increased by this proposal since the proposal has no direct effect on electrical power. Neither is the probability of exhaust fan failure increased by the proposal, since exhaust fans are not affected by this proposal, except that the number that must be OPERABLE is increased from two to three.

By requiring additional supply fans and exhaust fans to be OPERABLE, no single failure of either a vital bus or ABVS fan prevents (1) maintenance of negative Auxiliary Building pressure or (2) maintenance of temperatures within design limits. Since ABVS supply and exhaust fans cannot initiate accidents, increasing the number of fans required to be OPERABLE cannot create the possibility of a new or different kind of accident from any accident previously evaluated.

Thus, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

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SALEM GENERATING STATION UNITS 1 AND 2
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AUXILIARY BUILDING VENTILATION SYSTEM (ABVS)**

3. ***The proposed change does not involve a significant reduction in a margin of safety.***

The margin of safety is dependent upon the maintenance of specific operating parameters within designated design limits. Since iodine removal capability is not affected by the proposed changes, and negative Auxiliary Building pressures and temperatures will continue to be maintained within existing design limits under post-accident conditions, including consideration of the most limiting single active failure, the margin of safety is not reduced. By imposing new restrictions on the allowed outage times of ABVS components, the margin of safety is not reduced by the proposed changes to the ABVS Technical Specification Limiting Condition for Operation (LCO).

CONCLUSION

Based on the above, PSE&G has determined that the proposed changes do not involve a significant hazards consideration. Public Service Electric & Gas has concluded that the proposed changes to the Salem Generating Station Technical Specifications do not involve a significant hazards consideration.