

3.15 AIR TREATMENT SYSTEMS

3.15.1 EMERGENCY CONTROL ROOM AIR TREATMENT SYSTEM

Applicability

Applies to the emergency control room air treatment system and its associated filters.

Objective

To specify minimum availability and efficiency for the emergency control room air treatment system and its associated filters.

Specifications

- 3.15.1.1 Except as specified in Specification 3.15.1.3 below, both emergency treatment systems, AH-E18A fan and associated filter AH-F3A and AH-E188 fan and associated filter AH-F3B shall be operable at all times, per the requirements of Specification 3.15.1.2 below, when containment integrity is required and when irradiated fuel handling operations are in progress.
- 3.15.1.2* a. The results of the in-place DOP and halogenated hydrocarbon tests at design flows on HEPA filters and charcoal adsorber banks shall show <0.05% DOP penetration and <0.05% halogenated hydrocarbon penetration, except that the DOP test will be conducted with prefilters installed.
- b. The results of laboratory carbon sample analysis shall show $\geq 90\%$ radioactive methyl iodide decontamination efficiency when tested at 125°F, 95% R.H.
- c. The fans AH-E18A and B shall each be shown to operate within ± 4000 CFM of design flow (40,000 CFM).
- 3.15.1.3 From and after the date that one control room air treatment system is made or found to be inoperable for any reason, reactor operation or irradiated fuel handling operations are permissible only during the succeeding 7 days provided the redundant system is demonstrated to be operable per 4.12.1.1 and 4.12.1.3 within 24 hours and daily thereafter.
- 3.15.1.4 From the date that both control room air treatment systems are made or found to be inoperable or if the inoperable system of 3.15.1.3 cannot be made operable in 7 days, irradiated fuel handling operations shall be terminated in 2 hours and reactor shutdown shall be initiated and the reactor shall be in cold shutdown within 48 hours.

*Not required for Hot Functional Testing prior to Restart (Cycle 5)

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3.15.2 REACTOR BUILDING PURGE AIR TREATMENT SYSTEM

Applicability

Applies to the reactor building purge air treatment system and its associated filters.

Objective

To specify minimum availability and efficiency for the reactor building purge air treatment system and its associated filters.

Specification

- 3.15.2.1 Except as specified in Specification 3.15.2.3 below, the Reactor Building Purge Air Treatment System filter AH-F1 and fans AH-E7A and B shall be operable as defined by the Specification below at all times when containment integrity is required.
- 3.15.2.2* a. The results of the in-place DOP and halogenated hydrocarbon tests at maximum available flows on HEPA filters and charcoal adsorber banks for AH-F1 shall show <0.05% DOP penetration and <0.05% halogenated hydrocarbon penetration, except that the DOP test will be conducted with prefilters installed.
- b. The results of laboratory carbon sample analysis from the reactor building purge system filter carbon shall show $\geq 90\%$ radioactive methyl iodide decontamination efficiency when tested at 250°F, 95% R.H.
- c. Fans AH-E7A and B shall each be shown to operate within $\pm 2,500$ CFM of design flow (25,000 CFM).
- 3.15.2.3 a. From and after the date that the filter AH-F1 in the reactor building purge system is made or found to be inoperable as defined by Specification 3.15.2.2 above, or both fans AH-E7A and B are found to be inoperable, reactor operation is permissible only during the succeeding 30 days, unless such filter and at least one fan is sooner made operable.
- b. If the required conditions for the reactor building purge filter and fan cannot be met after 30 days, operations shall be terminated immediately and the reactor placed in cold shutdown within 48 hours.

*Not required for Hot Functional Testing prior to Restart (Cycle 5)

Bases

The Reactor Building Purge Exhaust System filter AH-F1 while normally used to filter all reactor building exhaust air, serves also as the post-accident purge filter when used in conjunction with the Hydrogen Purge System to reduce hydrogen gas concentrations in the reactor building following a LOCA. It is necessary to demonstrate operability of these filters to assure readiness for service if required, approximately thirty (30) days following a hypothetical LOCA.