

3.7 PLANT SYSTEMS

3.7.9 Control Room Ventilation System (CRVS) Booster Fans

LCO 3.7.9 Two CRVS Booster Fan trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4,
During movement of recently irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Control Room pressure \leq 0.0 psig during operation of two CRVS Booster Fan trains.	A.1 Restore Control Room pressure to $>$ 0.0 psig during operation of two CRVS Booster Fan trains.	30 days
B. One CRVS Booster Fan train inoperable for reasons other than Condition A.	B.1 Restore CRVS Booster Fan train to OPERABLE status.	72 hours
C. Two CRVS Booster Fan trains inoperable for reasons other than Condition A.	C.1 Restore one CRVS Booster Fan train to OPERABLE status.	24 hours

(continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Required Action and associated Completion Time not met in MODE 1, 2, 3, or 4.	D.1 Be in MODE 3.	12 hours
	<u>AND</u> D.2 Be in MODE 5	36 hours
E. Required Action and associated Completion Time not met during movement of recently irradiated fuel assemblies.	E.1 Suspend movement of recently irradiated fuel assemblies.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.9.1 Operate each CRVS Booster Fan train for ≥ 1 hour.	92 days
SR 3.7.9.2 Perform required CRVS Booster Fan train filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.9.3 Verify two CRVS Booster Fan trains can maintain the Control Room at a positive pressure.	18 months

BASES

ACTIONS

A.1 (continued)

be OPERABLE in this Condition. If one or both CRVS Booster Fans are simultaneously inoperable, the Completion Time for these separate Conditions is more limiting than the 30 day Completion Time for Action A.1. If OPERABLE the CRVS Booster Fan train(s) can provide some dose reduction. The 30 day Completion Time is based on the low probability of an accident occurring during the time period and the potential for OPERABLE CRVS Booster Fan trains to provide some dose reduction.

B.1

With one CRVS Booster Fan train inoperable for reasons other than Condition A, action must be taken to restore the train to OPERABLE status within 72 hours. In this Condition, the remaining OPERABLE CRVS Booster Fan train provides some dose reduction for personnel in the Control Room. The 72 hour Completion Time is based on the low probability of an accident occurring during this time period, and ability of the remaining train to provide some dose reduction.

C.1

With the two CRVS Booster Fan trains inoperable for reasons other than Condition A, one train must be restored to OPERABLE status within 24 hours. In this Condition, the capability to minimize the radiation dose to personnel located in the Control Room during and after an accident is unavailable. The 24 hour Completion Time is based on the low probability of an accident occurring during this time period.

D.1

If the inoperable CRVS Booster Fan trains cannot be restored to OPERABLE status within the required Completion Time, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in at least MODE 3 within 12 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

BASES

ACTIONS
(continued)

E.1

During movement of recently irradiated fuel assemblies, when one or more CRVS trains are inoperable, action must be taken immediately to suspend activities that could release radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

SURVEILLANCE
REQUIREMENTS

SR 3.7.9.1

Standby systems should be checked periodically to ensure that they function properly. As the environment and normal operating conditions on this system are not severe, testing each train once every 92 days adequately checks this system. The trains need only be operated for \geq one hour and all dampers verified to be OPERABLE to demonstrate the function of the system. This test includes an external visual inspection of the CRVS Booster Fan trains. The 92 day Frequency is based on the known reliability of the equipment.

SR 3.7.9.2

This SR verifies that the required CRVS Booster Fan train testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CRVS Booster Fan train filter test frequencies are in accordance with Regulatory Guide 1.52 (Ref. 4). The VFTP includes testing HEPA filter performance and carbon adsorber efficiency. Specific test frequencies and additional information are discussed in detail in the VFTP.

SR 3.7.9.3

This SR verifies the integrity of the Control Room enclosure. The Control Room positive pressure, with respect to potentially contaminated adjacent areas, is periodically tested to verify that the CRVS Booster Fan trains are functioning properly. During the emergency mode of operation, the CRVS Booster Fan trains are designed to pressurize the Control Room to minimize unfiltered inleakage. The CRVS Booster Fan trains are designed to maintain this positive pressure with both trains in operation. The Frequency of 18 months is consistent with industry practice.

BASES

REFERENCES

1. UFSAR, Section 9.4.
2. UFSAR, Chapter 15.
3. 10 CFR 50.36.
4. Regulatory Guide 1.52, Rev. 2, March 1978.
