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U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Document Control Desk

Subject: Oconee Nuclear Station
Docket Numbers 50-269, 270, and 287
Technical Specification Bases (TSB) Change

Please find attached revisions to TSB 3.7.10, which was implemented on July 18, 2001. The change removes the statement related to "credit not being taken in the analysis for any reduction in Control Room Dose provided by the PRVS filters" from the Applicable Safety Analysis. In order to meet 10CFR20 Control Room Dose limits, credit must be taken for this system.

Attachment 1 contains the new Technical Specification Bases pages and Attachment 2 contains the markup version of the Bases page.

If any additional information is needed, please contact Larry E. Nicholson, (864-885-3292)

Very truly yours,

W. R. McCollum, Jr., Vice President
Oconee Nuclear Site

A001

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Attachment 1

B 3.7 PLANT SYSTEMS

B 3.7.10 Penetration Room Ventilation System (PRVS)

BASES

BACKGROUND

The PRVS filters air from the area of the active penetration rooms during the recirculation phase of a loss of coolant accident (LOCA).

The PRVS consists of two independent, redundant trains. Each train consists of a prefilter, a high efficiency particulate air (HEPA) filter, an activated carbon adsorber section for removal of gaseous activity (principally iodines), and a fan. Ductwork, valves or dampers, and instrumentation also form part of the system. The system initiates filtered ventilation of the Reactor Building penetration rooms area following receipt of an Engineered Safeguards actuation signal (ESAS).

The PRVS is a standby system. During emergency operations, the PRVS valves are realigned, and fans are started to begin filtration. Upon receipt of the ESAS signal(s), the stream of ventilation air discharges through the system filter trains. The prefilters remove any large particles in the air, and any entrained water droplets present, to prevent excessive loading of the HEPA filters and carbon adsorbers.

The PRVS is discussed in the UFSAR, Sections 6.5.1, 9.4.7, and 15.4.7 (Refs. 1, 2, and 3, respectively).

APPLICABLE SAFETY ANALYSES

The design basis of the PRVS is established by the Maximum Hypothetical Accident (MHA). In such a case, the system limits radioactive releases to within 10 CFR 100 (Ref. 7) requirements and personnel doses in the Control Room are maintained within the limits of 10 CFR 20 (Ref. 4). The analysis of the effects and consequences of an MHA is presented in Reference 3.

The PRVS also actuates following a large and small break LOCA, in those cases where the unit goes into the recirculation mode of long term cooling, and to cleanup releases of smaller leaks, such as from valve stem packing.

Following a LOCA, an ESAS starts the PRVS fans and opens the dampers located in the penetration room outlet ductwork.

The PRVS satisfies Criterion 3 of 10 CFR 50.36 (Ref. 5).

BASES (continued)

LCO

Two independent and redundant trains of the PRVS are required to be OPERABLE to ensure that at least one is available, assuming that a single failure disables the other train coincident with loss of offsite power.

The PRVS is considered OPERABLE when the individual components necessary to maintain the penetration room filtration are OPERABLE in both trains.

A PRVS train is considered OPERABLE when its associated:

a. Fan is OPERABLE;

b. HEPA filter and carbon adsorber are not excessively restricting flow, and are capable of performing their filtration functions; and

c. Ductwork, valves, and dampers are OPERABLE, and air flow can be maintained.

In addition, the penetration room boundaries, including the integrity of the walls, floors, ceilings, ductwork, and access doors, must be maintained within the assumptions of the design analysis.

APPLICABILITY

In MODES 1, 2, 3, and 4, the PRVS is required to be OPERABLE consistent with the OPERABILITY requirements of the containment.

In MODES 5 and 6, the PRVS is not required to be OPERABLE since the containment is not required to be OPERABLE.

ACTIONS

A.1

With one PRVS train inoperable, action must be taken to restore the PRVS train to OPERABLE status within 7 days. During this time, the remaining OPERABLE train is adequate to perform the PRVS safety function. However, the overall reliability is reduced because a single failure in the OPERABLE PRVS train could result in loss of PRVS function.

The 7 day Completion Time is appropriate because the risk contribution is less than that of the ECCS (72 hour Completion Time), and this system is not a direct support system for the ECCS. The 7 day Completion Time is based on the low probability of an accident occurring during this time period, and ability of the remaining train to provide the required capability.

BASES

ACTIONS (continued)

B.1 and B.2

If the required Action and associated Completion Time are not met, 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.

SURVEILLANCE REQUIREMENTS

SR 3.7.10.1

Standby systems should be checked periodically to ensure that they function properly. Since the environment and normal operating conditions on this system are not severe, testing each train once a month provides an adequate check on this system. The 31 day Frequency is based on known reliability of equipment and the two train redundancy available.

SR 3.7.10.2

This SR verifies that the required PRVS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). 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 3.7.10.3

This SR verifies that each PRVS train starts and operates on an actual or simulated actuation signal. The 18 month Frequency is consistent with the guidance in Reference 6.

SR 3.7.10.4

This SR verifies the integrity of the penetration rooms area. The ability of the PRVS to maintain a negative pressure, with respect to outside atmosphere, is periodically tested to verify proper functioning of the PRVS. During the post accident mode of operation, the PRVS is

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.10.4 (continued)

designed to maintain a slight negative pressure in the penetration rooms with respect to outside atmosphere to prevent unfiltered LEAKAGE. The PRVS is designed to maintain this negative pressure at a flow rate of 1000 ± 10% cfm from the area. The Frequency of 18 months on a STAGGERED TEST BASIS is consistent with industry practice and other filtration SRs.

SR 3.7.10.5

Operating the PRVS filter bypass valve is necessary to ensure that the system functions properly. The OPERABILITY of the PRVS filter bypass valve is verified if it can be opened. An 18 month Frequency is consistent with the guidance in Reference 6.

REFERENCES

1. UFSAR, Section 6.5.1.
2. UFSAR, Section 9.4.7.
3. UFSAR, Section 15.15.
4. 10 CFR 20.
5. 10 CFR 50.36.
6. Regulatory Guide 1.52.
7. 10 CFR 100.

Attachment 2

B 3.7 PLANT SYSTEMS

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BASES

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The PRVS is a standby system. During emergency operations, the PRVS valves are realigned, and fans are started to begin filtration. Upon receipt of the ESAS signal(s), the stream of ventilation air discharges through the system filter trains. The prefilters remove any large particles in the air, and any entrained water droplets present, to prevent excessive loading of the HEPA filters and carbon adsorbers.

The PRVS is discussed in the UFSAR, Sections 6.5.1, 9.4.7, and 15.4.7 (Refs. 1, 2, and 3, respectively).

APPLICABLE SAFETY ANALYSES

The design basis of the PRVS is established by the Maximum Hypothetical Accident (MHA). In such a case, the system limits radioactive releases to within 10 CFR 100 (Ref. 7) requirements and personnel doses in the Control Room are maintained within the limits of 10 CFR 20 (Ref. 4). The analysis of the effects and consequences of an MHA is presented in Reference 3. ~~No credit is taken in the analysis for any reduction in Control Room Dose provided by the PRVS filters~~.

The PRVS also actuates following a large and small break LOCA, in those cases where the unit goes into the recirculation mode of long term cooling, and to cleanup releases of smaller leaks, such as from valve stem packing.

Following a LOCA, an ESAS starts the PRVS fans and opens the dampers located in the penetration room outlet ductwork.

The PRVS satisfies Criterion 3 of 10 CFR 50.36 (Ref. 5).