



United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

SERIAL: HNP-04-165

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SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
TECHNICAL SPECIFICATION BASES CHANGE: Control Room Emergency Filtration System

Ladies and Gentlemen:

Harris Nuclear Plant (HNP) is providing revised Technical Specifications (TS) Bases pages for TS 3/4.7.6, "Control Room Emergency Filtration System". This TS Bases change is being made to provide clarification that a failure to secure the Reactor Auxiliary Building Normal Ventilation System upon receipt of a Control Room isolation signal will result in an inoperable control room boundary.

The revised TS Bases pages are provided in the Attachment to this letter.

Please refer any questions regarding this subject to me at (919) 362-3137.

Sincerely,

A handwritten signature in cursive script, appearing to read 'David H. Corlett'.

David H. Corlett
Supervisor –
Licensing and Regulatory Programs
Harris Nuclear Plant

DHC/rg

Attachment:

c:
Mr. R. A. Musser, NRC Sr. Resident Inspector
Mr. C. P. Patel, NRC Project Manager
Dr. W. D. Travers, NRC Regional Administrator

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SHEARON HARRIS NUCLEAR POWER PLANT
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TECHNICAL SPECIFICATIONS BASES CHANGE
Control Room Emergency Filtration System

TECHNICAL SPECIFICATION BASES PAGES

B 3/4 7-3a

B 3/4 7-3b

PLANT SYSTEMS

BASES

CONTROL ROOM EMERGENCY FILTRATION SYSTEM (Continued)

If the control room boundary is inoperable in MODES 1, 2, 3, and 4, the CREFS trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns. HNP will have written procedures available describing compensatory measures to be taken in the event of an intentional or unintentional entry into this condition. The 24 hour allowed out of service time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary. The 24 hour allowed out of service time is reasonable based on the low probability of a DBA occurring during this time period, and the availability of compensatory measures.

3/4.7.7 REACTOR AUXILIARY BUILDING EMERGENCY EXHAUST SYSTEM

INSERT "A"
PER ATTACHED

The OPERABILITY of the Reactor Auxiliary Building Emergency Exhaust System ensures that radioactive materials leaking from the ECCS equipment within the pump room following a LOCA are filtered prior to reaching the environment. Operation of the system with the heaters operating for at least 10 continuous hours in a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the safety analyses. ANSI N510-1980 will be used as a procedural guide for surveillance testing. Criteria for laboratory testing of charcoal and for in-place testing of HEPA filters and charcoal adsorbers is based upon removal efficiencies of 95% for organic and elemental forms of radioiodine and 99% for particulate forms. The filter pressure drop was chosen to be half-way between the estimated clean and dirty pressure drops for these components. This assures the full functionality of the filters for a prolonged period, even at the Technical Specification limit.

The LCO is modified by a note allowing the Reactor Auxiliary Building Emergency Exhaust System (RABEES) ventilation boundary to be opened intermittently under administrative controls. For entry and exit through doors, the administrative control of opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the control room. This individual will have a method to rapidly close the opening when a need for RABEES isolation is indicated.

If the RABEES boundary is inoperable in MODES 1, 2, 3, and 4, the RABEES trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE RABEES boundary within 24 hours. During the period that the RABEES boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19, 60, 64, and 10 CFR Part 100) should be utilized to protect plant personnel from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns. HNP will have written procedures available describing compensatory measures to be taken in the event of an intentional or unintentional entry into this condition. The 24 hour allowed out of service time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the RABEES boundary. The 24 hour allowed out of service time is reasonable based on the low probability of a DBA occurring during this time period, and the availability of compensatory measures.

INSERT "A"

A failure to secure the RAB Normal Ventilation System, as part of a control room isolation, results in an inoperable control room boundary. Various postulated alignments or malfunctions of the RAB Normal Ventilation System can result in either excessively positive or negative RAB pressures, which can compromise the ability of the CREFS trains to maintain the control room envelope at a positive pressure of 1/8 INWG or greater relative to adjacent areas, thus directly impacting design basis in-leakage assumptions and personnel dose consequences under accident conditions.

PLANT SYSTEMS

BASES

CONTROL ROOM EMERGENCY FILTRATION SYSTEM (Continued)

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CONTROL ROOM EMERGENCY FILTRATION SYSTEM (Continued)

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