

Attachment 2
Technical Specifications Changes

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The diesel generators function as an on-site back-up system to supply the emergency buses. Each emergency bus provides power to the following operating Engineered Safeguards equipment:

- A. One containment spray pump
- B. One charging pump
- C. One low head safety injection pump
- D. One recirculation spray pump inside containment
- E. One recirculation spray pump outside containment
- F. One containment vacuum pump
- G. One motor-driven auxiliary steam generator feedwater pump
- H. One motor control center for valves, instruments, control air compressor, fuel oil pumps, etc.
- I. Control area air conditioning equipment - four air recirculating units, two water chilling units, one service water pump and two chilled water circulating pumps
- J. One charging pump service water pump for charging pump intermediate seal coolers and lube oil coolers
- K. One charging pump cooling water pump for charging pump seal coolers.

3.23 MAIN CONTROL ROOM AND EMERGENCY SWITCHGEAR ROOM VENTILATION AND AIR CONDITIONING SYSTEMS

Applicability

Applies to the Main Control Room (MCR) and Emergency Switchgear Room (ESGR) Air Conditioning System and Emergency Ventilation System.

Objective

To specify requirements to ensure the proper function of the Main Control Room and Emergency Switchgear Room Air Conditioning System and Emergency Ventilation System.

Specification

- A. Both trains of the Main Control Room and Emergency Switchgear Room Emergency Ventilation System shall be OPERABLE whenever either unit is above COLD SHUTDOWN.
- B. With one train of the Main Control Room and Emergency Switchgear Room Emergency Ventilation System inoperable for any reason, return the inoperable train to an OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 6 hours and in COLD SHUTDOWN within the following 48 hours.
- C. The Main Control Room and Emergency Switchgear Room Air Conditioning System shall be OPERABLE as delineated in the following:
 - *1. Chiller Refrigeration Units
 - a. Three main control room and emergency switchgear room chillers must be OPERABLE whenever either unit is above COLD SHUTDOWN.

* This interim specification is necessary until the air conditioning system modifications are completed. Following completion of the permanent modifications, a revised air conditioning system specification will be submitted.

- b. The three OPERABLE chillers are required to be powered from three of the four emergency buses with one of those chillers capable of being powered from the fourth emergency bus.
- c. If one of the OPERABLE chillers becomes inoperable or is not powered as required by Specification 3.23.C.1.b, return an inoperable chiller to OPERABLE status within seven (7) days or bring both units to HOT SHUTDOWN within the next six (6) hours and be in COLD SHUTDOWN within the following 30 hours.
- d. If two of the OPERABLE chillers become inoperable or are not powered as required by Specification 3.23.C.1.b, return an inoperable chiller to OPERABLE status within one (1) hour or bring both units to HOT SHUTDOWN within the next six (6) hours and be in COLD SHUTDOWN within the following 30 hours.

2. Air Handling Units (AHU)

- a. Unit 1 air handling units, 1-VS-AC-1, 1-VS-AC-2, 1-VS-AC-6, and 1-VS-AC-7, must be OPERABLE whenever Unit 1 is above COLD SHUTDOWN.
 - 1. If one Unit 1 AHU becomes inoperable, return the inoperable AHU to OPERABLE status within seven (7) days or bring Unit 1 to HOT SHUTDOWN within the next six (6) hours and be in COLD SHUTDOWN within the following 30 hours.
- b. Unit 2 air handling units, 2-VS-AC-8, 2-VS-AC-9, 2-VS-AC-6, and 2-VS-AC-7 must be OPERABLE whenever Unit 2 is above COLD SHUTDOWN.
 - 1. If one Unit 2 AHU becomes inoperable, return the inoperable AHU to OPERABLE status within seven (7) days or bring Unit 2 to HOT SHUTDOWN within the next six (6) hours and be in COLD SHUTDOWN within the following 30 hours.

Amendment Nos.

Basis

When the supply of compressed bottled air is depleted, the Main Control Room and Emergency Switchgear Room Emergency Ventilation System is manually started to continue to maintain the control room pressure at the design positive pressure so that leakage is outleakage. One train of the main control room emergency ventilation consists of one fan powered from an independent emergency power source.

The Main Control Room and Emergency Switchgear Room Emergency Ventilation System is designed to filter the intake air to the control room pressure envelope, which consists of the control room, relay rooms, and emergency switchgear rooms during a loss of coolant accident.

High efficiency particulate air (HEPA) filters are installed before the charcoal adsorbers to prevent clogging of the iodine adsorbers. The charcoal adsorbers are installed to reduce the potential intake of radio-iodine to the control room. The in-place test results should indicate a system leaktightness of less than 1 percent bypass leakage for the charcoal adsorbers and a HEPA efficiency of at least 99.5 percent removal of DOP particulates. The laboratory carbon sample test results should indicate a radioactive methyl iodide removal efficiency of at least 95 percent for expected accident conditions. The control room dose calculations assume only 90 percent iodine removal efficiency for the air passing through the charcoal filters. Therefore, if the efficiencies of the HEPA filters and charcoal adsorbers are as specified, at the temperatures, flow rates and velocities within the design values of the system, the resulting doses will be less than the allowable levels states in Criterion 19 of the General Design Criteria for Nuclear Power Plants, Appendix A to 10 CFR Part 50.

If the system is found to be inoperable, there is no immediate threat to the control room, and reactor operation may continue for a limited period of time while repairs are being made. If the system cannot be repaired within the specified time, procedures are initiated to establish conditions for which the filter system is not required.

Amendment Nos.

The Main Control Room and Emergency Switchgear Room Air Conditioning System cools the main control room, the control room annex and the Units 1 and 2 emergency switchgear rooms. The existing air conditioning system includes three chillers (1-VS-E-4A, 4B, and 4C) and eight air handling units (1-VS-AC-1, 2, 6, 7 and 2-VS-AC-6, 7, 8, and 9).

Interim modifications were completed on the Main Control Room and Emergency Switchgear Room Air Conditioning System to address interim failure and increased cooling requirements for the emergency switchgear rooms. Permanent modifications will include replacement of the main control room and emergency switchgear room air handling units (AHU) and installation of additional chiller capacity to restore original design flexibility.

Units 1 and 2 main control room and emergency switchgear room AHUs have been replaced in the initial phases of the permanent modification, restoring redundancy to the AHU portion of the original system design. As a result, the following main control room and emergency switchgear room equipment is required to operate to maintain design temperature under maximum heat load conditions:

- Two chillers
- One Unit 1 MCR AHU and one Unit 1 ESGR AHU
- One Unit 2 MCR AHU and one Unit 2 ESGR AHU

The existing chiller configuration requires that the three chillers in MER-3 (1-VS-E-4A, 4B, and 4C) be OPERABLE so that in the event of a total Loss of Offsite Power to the station and the single failure of an emergency bus or a chiller, two chillers remain available. Installation of the two additional chillers in MER-5 (1-VS-E-4D and 4E) will provide operational flexibility. Any three of the five installed chillers, powered from separate emergency buses with one of those capable of being powered from the fourth emergency bus, will ensure two chillers are available to maintain design temperature under maximum heat load conditions. This operational flexibility is necessary to complete the permanent modification of the existing chillers.

In addition to the equipment restrictions above, a fire watch will be required during this interim period in MER-3 to address Appendix R considerations.