Attachment 2

Proposed Technical Specification Amendment No. 93

Affected Pages: TS 3.3-5
TS 3.3-10
TS 3.3-11
TS 3.3-12
TS 3.6-1
TS 3.6-2
TS 3.12-1

vals specified. If operability is not restored within the time specified, then within 1 hour action shall be initiated to:

-Achieve Hot Standby within the next 6 hours.
-Achieve Hot Shutdown within the following 6 hours.
-Achieve Cold Shutdown within an additional 36 hours.

A. The quantity of NaOH solution available as a containment spray additive may be less than that specified in TS 3.3.c.1.A for a period of 48 hours.

B. One containment fan coil unit train may be out of service for 7 days provided the opposite containment fan coil unit train remains operable.

C. One containment spray train may be out of service for 72 hours provided the opposite containment spray train remains operable.

D. Both containment fan coil unit trains may be out of service for 72 hours provided both containment spray trains remain operable.

E. The same containment fan coil unit and containment spray trains may be out of service for 72 hours provided their opposite containment fan coil unit and containment spray trains remain operable.

dition may be indicative of need for major maintenance, and in such cases the reactor should therefore be placed in the cold shutdown condition.

The accumulator and refueling water storage tank conditions specified are consistent with those assumed in the LOCA analysis.(2)

The containment cooling function is provided by two systems: containment fan-coil units and containment spray systems. The containment fan coil units and containment spray system protect containment integrity by limiting the temperature and pressure that could be experienced following a Design Basis Accident. The Limiting Design Basis accidents relative to containment integrity are the loss of coolant accident and steam line break. During normal operation, the fan-coil units are required to remove heat lost from equipment and piping within the containment.(3) In the event of the Design Basis Accident, any one of the following combinations will provide sufficient cooling to limit containment pressure to less than design values: four fan-coil units, two containment spray pumps, or two fan-coil units plus one containment spray pump.(4)

In addition to heat removal, the containment spray system is also effective in scrubbing fission products from the containment atmosphere. Therefore, a minimum of one train of containment spray is required to remain operable in order to scavenge iodine fission products from the containment atmosphere and ensure their retention in the containment sump water.(8)(9)

Sodium Hydroxide (NaOH) is added to the spray solution for pH adjustment. The resulting alkaline pH of the spray enhances the ability of the spray to scavenge iodine fission products from the containment atmosphere. The NaOH added in the spray also ensures an alkaline pH for the solution recirculated in the containment sump.

The alkaline pH of the containment sump water inhibits the volatility of iodine and minimizes the occurrence of chloride and caustic stress corrosion on mechanical systems and components exposed to the sump fluid. Test data has shown that no significant stress corrosion cracking will occur provided the pH is adjusted within two (2) days following the Design Basis Accident.(4)(7)

A minimum of 300 gallons of not less than 30% by weight of NaOH solution is sufficient to adjust the pH of the spray solution adequately. The additive will still be considered available whether it is contained in the spray additive tank or the containment spray system piping due to an inadvertent opening of the spray additive valves (CI-1001A and CI-1001B).

One component cooling water pump together with one component cooling heat exchanger can accommodate the heat removal load either following a loss-of-coolant accident, or during normal plant shutdown. If, during the post-accident phase, the component cooling water supply were lost, core and containment cooling could be maintained until repairs were effected.(5)

A total of four service water pumps are installed, and a minimum of two are required to operate during the postulated loss-of-coolant accident.(6) The service water valves in the redundant safeguards headers have to be operable in order for the components that they supply to be considered operable.

The various trains of equipment referred to in the specifications are separated by their power supplies (i.e.: SI Pump 1A, RHR Pump 1A, Valves SI-2A and SI-4A, etc.). Shared piping and valves are considered to be common to both trains of the systems (i.e.: SI-3, etc.).

The closure of the hand operated valve for a brief period of time during the surveillance testing of the automatic valves in the safety injection system will prevent dilution of the concentrated boric acid or loss of concentrated boric acid to the refueling water storage tank.

References

(1) USAR Section 3.2

(2) USAR Section 14.3

(3) USAR Section 6.3

(4) USAR Section 6.4

(5) USAR Section 9.3

(6) USAR Section 9.6

(7) Westinghouse Chemistry Manual SIP 5-1, Rev. 2, dated 3-77, Section 4.

(8) USAR Section 6.4.3

(9) USAR Section 14.3.5

3.6 CONTAINMENT SYSTEM

Applicability

Applies to the integrity of the Containment System.

Objective

To define the operating status of the Containment System.

Specification

a. Containment System integrity shall not be violated if there is fuel in the reactor which has been used for power operation, except whenever either of the following conditions remains satisfied:

   1. The reactor is in the cold shutdown condition with the reactor vessel head installed, or

   2. The reactor is in the refueling shutdown condition.

b. All of the following conditions shall be satisfied whenever Containment System integrity as defined by Specification 1.0g is required:

   1. Both trains of the Shield Building Ventilation System, including filters and heaters shall be operable or the reactor shall be shut down within 12 hours, except that when one of the two trains of the Shield Building Ventilation System is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding seven days.

   2. Both trains of the Auxiliary Building Special Ventilation System including filters and heaters shall be operable or the reactor shall be shut down within 12 hours, except that when one of the two trains of the Auxiliary Building Special Ventilation System is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding seven days.

3. Performance Requirements

A. The results of the in-place cold DOP and halogenated hydrocarbon tests at design flows on HEPA filters and charcoal adsorber banks shall show $\geq$ 99% DOP removal and $\geq$ 99% halogenated hydrocarbon removal.

B. The results of laboratory carbon sample analysis from the Shield Building Ventilation System and the Auxiliary Building Special Ventilation System carbon shall show $\geq$ 90% radioactive methyl iodide removal at conditions of 130°C, 95% RH for the Shield Building Ventilation System and 66°C, 95% RH for the Auxiliary Building Special Ventilation System.

C. Fans shall operate within $\pm$ 10% of design flow when tested.

c. If the internal pressure of the Reactor Containment Vessel exceeds 2 psi, the condition shall be corrected within eight hours or the reactor shall be placed in a subcritical condition.

d. The reactor shall not be taken above the cold shutdown condition unless the containment ambient temperature is greater than 40°F.

Basis

Proper functioning of the Shield Building Ventilation System is essential to the performance of the Containment System. Therefore, except for reasonable periods of maintenance outage for one redundant train of equipment, the complete system should be in readiness whenever Containment System integrity is required. Proper functioning of the Auxiliary Building Special Ventilation System is similarly necessary to preclude possible unfiltered leakage through

3.12 CONTROL ROOM POSTACCIDENT RECIRCULATION SYSTEM

APPLICABILITY

Applies to the operability of the Control Room Postaccident Recirculation System.

OBJECTIVE

To specify operability requirements for the Control Room Postaccident Recirculation System.

SPECIFICATIONS

a. The reactor shall not be made critical unless both trains of the Control Room Postaccident Recirculation System are operable.

b. Both trains of the Control Room Postaccident Recirculation System, including filters shall be operable or the reactor shall be shut down within 12 hours, except that when one of the two trains of the Control Room Postaccident Recirculation System is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding SEVEN days.

c. During testing the system shall meet the following performance requirements:

   1. The results of the in-place cold DOP and halogenated hydrocarbon tests at design flows on HEPA filter and charcoal adsorber banks shall show $\geq$ 99% DOP removal and $\geq$ 99% halogenated hydrocarbon removal.