

VYNPS

- G. Instrument Functional Test - An instrument functional test means the injection of a simulated signal into the instrument primary sensor, to verify the proper instrument channel response, alarm, and/or initiating action.
- H. Log System Functional Test - A logic system functional test means a test of all relays and contacts of a logic circuit from sensor to activated device to insure all components are operable per design intent. Where possible, action will go to completion, i.e., pumps will be started and valves opened.
- I. Minimum Critical Power Ratio - The Minimum Critical Power Ratio is defined as the ratio of that power in a fuel assembly which is calculated to cause some point in that assembly to experience boiling transition as calculated by application of the GEXL correlation to the actual assembly operating power. (Reference NEDO-10958)
- J. Mode - The reactor mode is that which is established by the mode-selector-switch.
- K. Operable - A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).
- L. Operating - Operating means that a system or component is performing its intended functions in its required manner.
- M. Operating Cycle - Interval between the end of one refueling outage and the end of the next subsequent refueling outage.
- N. Primary Containment Integrity - Primary containment integrity means that the drywell and pressure suppression chamber are intact and all of the following conditions are satisfied:
1. All manual containment isolation valves on lines connecting to the reactor coolant system or containment which are not required to be open during accident conditions are closed.
  2. At least one door in each airlock is closed and sealed.
  3. All automatic containment isolation valves are operable or deactivated in the isolated position.
  4. All blind flanges and manways are closed.
- O. Protective Instrumentation Definitions
1. Instrument Channel - An instrument channel means an arrangement of a sensor and auxiliary equipment required to generate and transmit to a trip system a single trip signal related to the plant parameter monitored by that instrument channel.
  2. Trip System - A trip system means an arrangement of instrument channel trip signals and auxiliary equipment required to initiate action to accomplish a protective trip function. A trip system may require one or more instrument channel trip signals related to one or more plant parameters in order to initiate trip system action. Initiation of protective action may require the tripping of a single trip system or the coincident tripping of two trip systems.

## 3.7 LIMITING CONDITIONS FOR OPERATION

1. Except as specified in Specification 3.7.B.3 below, both circuits of the Standby Gas Treatment System shall be operable at all times when secondary containment integrity is required.
2.
  - a. The results of the in-place cold DOP and halogenated hydrocarbon tests at design flows on HEPA and charcoal filter banks shall show >99% DOP removal and >99% halogenated hydrocarbon removal.
  - b. The results of laboratory carbon sample analysis shall show >95% radioactive methyl-iodide removal. (130°C, 95% R.H.)
  - c. System fans shall be shown to operate within ± 10% of design flow.
3. From and after the date that one circuit of the Standby Gas Treatment System is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding seven days unless such circuit is sooner made operable, provided that during such seven days all active components of the other standby gas treatment circuit shall be operable.

## 4.7 SURVEILLANCE REQUIREMENTS

- a. Pressure drop across the combined HEPA and charcoal filter banks is less than 6 inches of water at 1500 cfm ± 10%.
- b. Inlet heater input is at least 9 kW.
2.
  - a. The tests and sample analysis of Specification 3.7.B.2 shall be performed initially and at least once per operating cycle not to exceed 18 months, and following painting, fire, or chemical release in any ventilation zone communicating with the system, while the system is operating, that could contaminate the HEPA filters or charcoal adsorbers.
  - b. Cold DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank.
  - c. Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal filter bank.  
  
In addition, the sample analysis of Specification 3.7.B.2.b and the halogenated hydrocarbon test shall be performed after every 720 hours of system operation.
  - d. Each circuit shall be operated with the heaters on at least 10 hours every month.
  - e. An ultrasonic leak test shall be performed on the gaskets sealing the housing panels downstream of the HEPA filters and adsorbers at least once per operating cycle not to exceed 18 months. If the ultrasonic test indicates the presence of a leak, the condition will be evaluated and the gasket repaired or replaced, as necessary.