

PLANT SYSTEMS

3/4.7.11 ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.11 The ultimate heat sink shall be OPERABLE with a water temperature of less than or equal to 75°F.

APPLICABILITY: MODES 1, 2, 3, AND 4

ACTION:

With the requirements of the above specification not satisfied, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.*

SURVEILLANCE REQUIREMENTS

- 4.7.11 The ultimate heat sink shall be determined OPERABLE:
- a. At least once per 24 hours by verifying the water temperature to be within limits.
 - b. At least once per 6 hours by verifying the water temperature to be within limits when the water temperature exceeds 70°F.

* The following ACTIONS apply through October 15, 2000:

- a. With the ultimate heat sink water temperature greater than 75°F and less than 77°F, operation may continue for up to 12 hours provided the water temperature is verified below 77°F at least once per hour. Otherwise, be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With the ultimate heat sink water temperature greater than 77°F, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

PLANT SYSTEMS

BASES

3/4.7.10 DELETED

3/4.7.11 ULTIMATE HEAT SINK

The limitations on the ultimate heat sink temperature ensure that sufficient cooling capacity is available to either,

- 1) provide normal cooldown of the facility, or 2) to mitigate the effects of accident conditions within acceptable limits.

The limitations on maximum temperature are based on a 30-day cooling water supply to safety related equipment without exceeding their design basis temperature.

Various indications are available to monitor the temperature of the ultimate heat sink (UHS). The following guidelines apply to ensure the UHS Technical Specification limit is not exceeded.

The control room indications are normally used to ensure compliance with this specification. Control room indications are acceptable because of the close correlation between control room indications and local Service Water System (SWS) header indications (historically within approximately 2°F). The highest reading valid temperature obtained from the Unit 2 intake structure and the inlets to the Circulating Water System water boxes shall be used to verify the UHS temperature limit of 75°F is not exceeded.

When the highest reading valid control room indication indicates the temperature of the UHS is > 70°F, local SWS header indications must be used. The highest reading valid local SWS header temperature shall be used to verify the UHS temperature limit of 75°F is not exceeded. Normally, local SWS header temperature will be taken at the inlet to the vital AC switchgear room cooling coils. If the local SWS header temperature cannot be taken at the inlet to the vital AC switchgear room cooling coils, the inlet to the Reactor Building Closed Cooling Water heater exchangers, or other acceptable instrumentation should be used to determine SWS header temperature.

The following ACTIONS apply through October 15, 2000:

If the UHS temperature exceeds 75°F, a 12 hour monitoring period is permitted. This 12 hour period should allow time for the UHS temperature to return to a value below 75°F as the tidal effects on the UHS temperature dissipate. During this 12 hour period, local service water header indications are to be used. If the UHS temperature does not drop below the 75°F Technical Specification limit within 12 hours, or if the UHS temperature exceeds 77°F, a plant shutdown in accordance with the action requirements will be necessary.