

EXCERPTS FROM THE VERMONT YANKEE NUCLEAR POWER STATION

TECHNICAL SPECIFICATIONS (TS) AND BASES

LIMITING CONDITION FOR OPERATION

TS LCO 3.7.A, "PRIMARY CONTAINMENT" states:

1. Whenever primary containment is required, the volume and temperature of the water in the suppression chamber shall be maintained within the following limits:
 - a. Maximum Water Temperature during normal operation - 90 °F.
 - b. Maximum Water Temperature during any test operation which adds heat to the suppression pool - 100 °F; however, it shall not remain above 90 °F for more than 24 hours.
 - c. If Torus Water Temperature exceeds 110 °F, initiate an immediate scram of the reactor. Power operation shall not be resumed until the pool temperature is reduced below 90 °F.
 - d. During reactor isolation conditions, the reactor pressure vessel shall be depressurized to less than 200 psig at normal cooldown rates if the torus water temperature exceeds 120 °F.

BASES FOR TS 3.7.A

The maximum temperature at the end of blowdown tested during the Humbolt Bay and Bodega Bay tests was 170 °F and this is conservatively taken to be the limit for complete condensation of the reactor coolant, although condensation would occur for temperature above 170 °F.

Using a 50 °F rise in the suppression chamber water temperature and a minimum water volume of 68,000 ft³, the 170 °F temperature which is used for complete condensation would be approached only if the suppression pool temperature is 120 °F prior to the DBA-LOCA. Maintaining a pool temperature of 90 °F will assure that the 170 °F limit is not approached.

SURVEILLANCE REQUIREMENT

SR 4.7.A.1 requires the suppression pool average temperature to be within the applicable limits and be verified daily AND every 5 minutes when performing testing that adds heat to the suppression pool.