

ATTACHMENT 2 TO AEP:NRC:1317

CURRENT PAGES MARKED-UP TO SHOW  
PROPOSED TECHNICAL SPECIFICATION AMENDMENT - CONTAINMENT SYSTEMS  
BASES 3/4.6.1.4 INTERNAL PRESSURE and 3/4.6.1.5 AIR TEMPERATURE

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3/4 BASES  
3/4.6 CONTAINMENT SYSTEMS

3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that 1) the containment structure is prevented from exceeding its design negative pressure differential with respect to the outside atmosphere of 8 psig and 2) the containment peak pressure does not exceed the design pressure of 12 psig during LOCA conditions.

The maximum peak pressure resulting from a LOCA event is calculated to be 11.49 psig, which includes 0.3 psig for initial positive containment pressure.

3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that 1) the containment air mass is limited to an initial mass sufficiently low to prevent exceeding the design pressure during LOCA conditions and 2) the ambient air temperature does not exceed that temperature allowable for the continuous duty rating specified for equipment and instrumentation located within containment.

The containment pressure transient is sensitive to the initially contained air mass during a LOCA. The contained air mass increases with decreasing temperature. The lower temperature limit of 60°F will limit the peak pressure to 11.49 psig which is less than the containment design pressure of 12 psig. The upper temperature limit influences the peak accident temperature slightly during a LOCA; however, this limit is based primarily upon equipment protection and anticipated operating conditions. Both the upper and lower temperature limits are consistent with the parameters used in the accident analyses.

3/4.6.1.6 CONTAINMENT VESSEL STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment steel vessel will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that (1) the steel liner remains leak tight and (2) the concrete surrounding the steel liner remains capable of providing external missile protection for the steel liner and radiation shielding in the event of a LOCA. A visual inspection in conjunction with Type A leakage tests is sufficient to demonstrate this capability.

The lower temperature limit of 60°F will limit the calculated peak containment pressure to less than the containment design pressure of 12 psig.

The calculation for maximum peak containment pressure following a LOCA assumes an initial containment pressure of positive 0.3 psig and demonstrates that the 12 psig containment design pressure will not be exceeded.

### 3/4 BASES

#### 3/4.6 CONTAINMENT SYSTEMS

##### 3/4.6.1.4 INTERNAL PRESSURE

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##### 3/4.6.1.6 CONTAINMENT VESSEL STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that (1) the steel liner remains leak tight and (2) the concrete surrounding the steel liner remains capable of providing external missile protection for the steel liner and radiation shielding in the event of a LOCA. A visual inspection in conjunction with Type A leakage tests is sufficient to demonstrate this capability.

The lower temperature limit of 60°F will limit the calculated peak containment pressure to less than the containment design pressure of 12 psig.

The calculation for maximum peak containment pressure following a LOCA assumes an initial containment pressure of positive 0.3 psig and demonstrates that the 12 psig containment design pressure will not be exceeded.

ATTACHMENT 3 TO AEP:NRC:1317

PROPOSED TECHNICAL SPECIFICATION AMENDMENT - CONTAINMENT SYSTEMS  
BASES 3/4.6.1.4 INTERNAL PRESSURE and 3/4.6.1.5 AIR TEMPERATURE



3/4 BASES  
3/4.6 CONTAINMENT SYSTEMS

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3/4.6.1.4 INTERNAL PRESSURE

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3/4.6.1.5 AIR TEMPERATURE

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3/4.6.1.6 CONTAINMENT VESSEL STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment steel vessel will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that (1) the steel liner remains leak tight and (2) the concrete surrounding the steel liner remains capable of providing external missile protection for the steel liner and radiation shielding in the event of a LOCA. A visual inspection in conjunction with Type A leakage tests is sufficient to demonstrate this capability.

UNIT 2

3/4. BASES  
3/4.6. CONTAINMENT SYSTEMS

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3/4.6.1.4 INTERNAL PRESSURE

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The calculation for maximum peak containment pressure following a LOCA assumes an initial containment pressure of positive 0.3 psig and demonstrates that the 12 psig containment design pressure will not be exceeded.

3/4.6.1.5 AIR TEMPERATURE

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3/4.6.1.6 CONTAINMENT VESSEL STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that (1) the steel liner remains leak tight and (2) the concrete surrounding the steel liner remains capable of providing external missile protection for the steel liner and radiation shielding in the event of a LOCA. A visual inspection in conjunction with Type A leakage tests is sufficient to demonstrate this capability.



