

Chapter 16 and Technical Specifications	
Noteworthy Changes from DCA to SDA	Discussion
<p>Technical Report TR-101310, "US460 Standard Design Approval Technical Specifications Development," Rev 0 describes differences between US600 and US460 Technical Specifications at the time of SDAA submittal.</p>	<p>The reasons for changes are described in general terms, and includes removals, relocations, and new requirements.</p>
<p>LCO 3.1.2 Core reactivity balance surveillance frequency was clarified.</p>	<p>The response to Audit Item A-16.3.1.2-1 revised SR 3.1.2.1 by removing the note associated with adjustment of predicted reactivity values to correspond to measured core reactivity prior to exceeding a fuel burnup of 60 EFPD. NuScale has no basis for the inclusion of this note other than consistency with the Standard Technical Specifications. The note implied that adjustment of predicted reactivity values is prohibited beyond 60 EFPD. There is no restriction on the timing of the revision of predicted reactivity values.</p> <p>The revision to SR 3.1.2.1 also removed a note in the frequency column. The note described when the surveillance is to be performed, and was unnecessary. The Surveillance Frequency Control Program (SFCP) establishes the surveillance frequency.</p>
<p>TS 3.1.9 modified to incorporate additional controls on possible dilution flow paths associated with the Module Heatup System (MHS).</p>	<p>Responses to Audit Items A-16.3.1.9-2 and A-16.3.1.9-3 revised TS 3.1.9 to include:</p> <ul style="list-style-type: none"> • New LCO related to MHS flow paths • Revision to Mode 3 Applicability to include "with any dilution source flow path not isolated" • Changes to Actions to address new MHS LCO • Changes to SR 3.1.9.5 to clarify verification that MHS flow paths to and from cross-connected systems are isolated. • Supporting Bases changes

	<p>The MHS heats the RCS to assist in developing natural circulation through the core before nuclear heat addition. The MHS is shared among NPMs and, when in service for a module, could represent an inadvertent dilution source for other modules. The revisions to LCO 3.1.9 ensure the modules not being heated by MHS are isolated from the MHS by two closed valves.</p>
<p>TS 3.5.4 modified to address the form of the emergency core cooling system supplemental boron (ESB) pellets and the associated requirements to be specified in the core operating limits report.</p>	<p>Response to Audit Item A-16.3.5.4-1 revised TS 3.5.4 and associated Bases to address the form of boron pellets and the associated requirements to be specified in the core operating limits report.</p> <p>The pellet dissolution rate depends on the geometric form (dimensions and shape) of the boron pellets.</p>
<p>TS 5.5.4, "Steam Generator (SG) Program," revised to update the tube integrity discussion, plugging criterion and inspection requirements.</p>	<p>To determine an appropriate steam generator tube plugging criterion for the US460 design, NuScale performed a finite element analysis specific to the US460 design. TS 5.5.4 was updated to reflect the analysis, and bracket the tube plugging criterion</p> <p>Revisions to inspection requirements increased inspection frequency and specificity.</p>