

PROPOSED REVISION 15
AP1000 DESIGN CONTROL DOCUMENT

Tier 1 Table 2.3.9-3

Containment Hydrogen Control System

Description of Change

Revise Tier 1 Table 2.3.9-3 to change the hydrogen igniters from “exceeds 1700°F” to “exceeds 1600°F.”

Technical Justification

This change provides margin to the nominal 1700°F, and it is well above the ignition point of hydrogen.

Regulatory Consequence

There is no effect on the FSER. However, this correction does represent a change in Tier 1 material.

Change Markup

Tier 1 Table 2.3.9-3 Revise item 3 in Tier 1 Table 2.3.9-3 as follows:

Table 2.3.9-3 Inspections, Tests, Analyses, and Acceptance Criteria		
Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
3. The VLS provides the nonsafety-related function to control the containment hydrogen concentration for beyond design basis accidents.	<ul style="list-style-type: none"> i) Inspection for the number of igniters will be performed. ii) Operability testing will be performed on the igniters. iii) An inspection of the as-built containment internal structures will be performed. 	<ul style="list-style-type: none"> i) At least 64 hydrogen igniters are provided inside containment at the locations specified in Table 2.3.9-2. ii) The surface temperature of the igniter exceeds 1600<u>1700</u>°F. iii) The minimum distance between the primary openings through the ceilings of the passive core cooling system valve/accumulator rooms (11206, 11207) and the containment shell is at least 19 feet. Primary openings are those that constitute 98% of the opening area. Other openings through the ceilings of these rooms must be at least 3 feet from the containment shell.
	iv) An inspection will be performed of the as-built IRWST vents that are located in the roof of the IRWST along the side of the IRWST next to the containment shell.	iv) The discharge from each of these IRWST vents is oriented generally away from the containment shell.