



SPENT FUEL POOL COOLING AND CLEANUP SYSTEM

Section 3.2

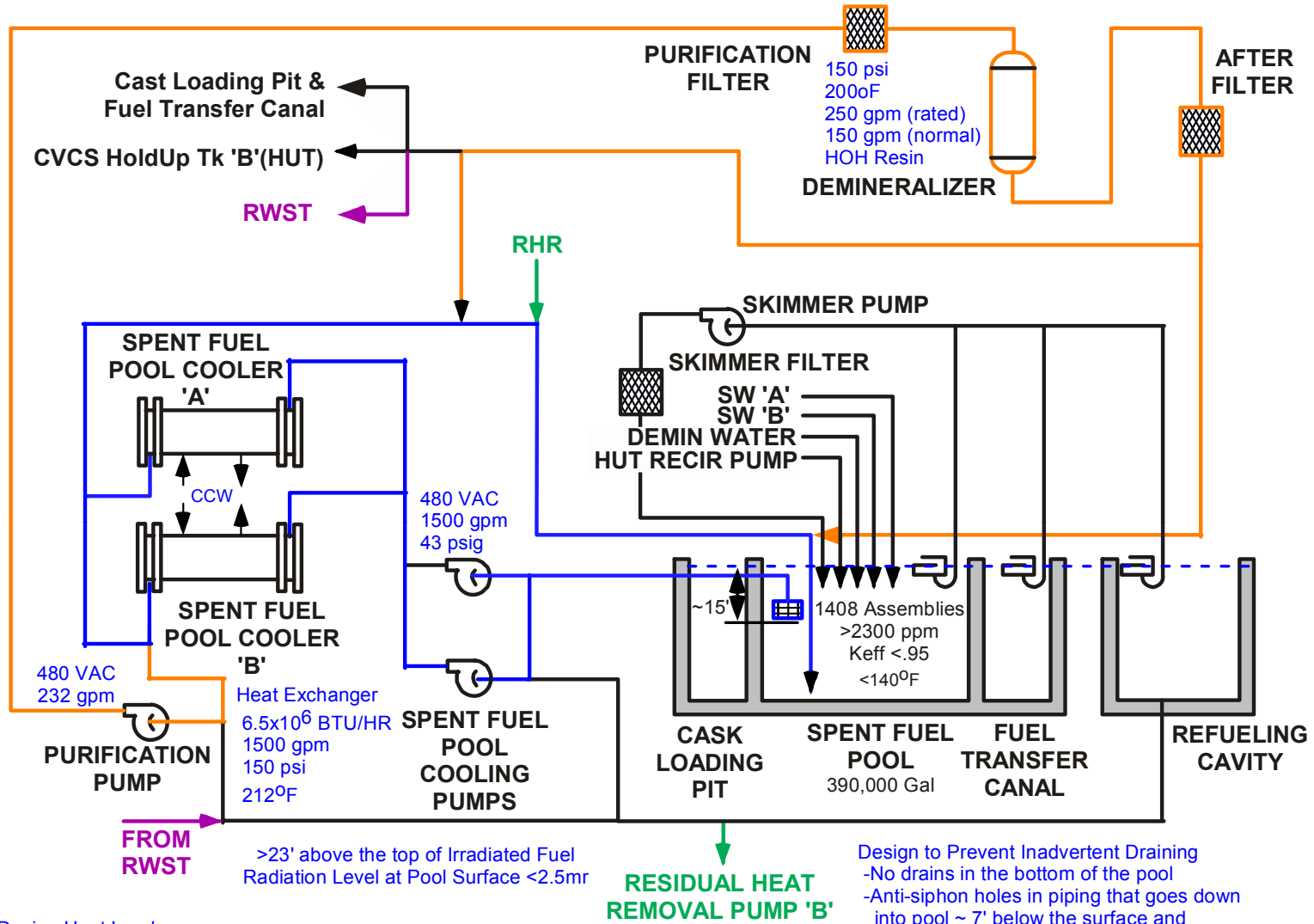
Objectives

- State the purposes of the spent fuel pool cooling and cleanup system
- Describe the design features of the spent fuel pool cooling and cleanup system which prevent inadvertently lowering the water level in the spent fuel pool

Purposes of the Spent Fuel Cooling and Cleanup System.

- Remove the decay heat generated by fuel assemblies stored in the spent fuel pool (Cooling)
- Maintain optical clarity of the spent fuel pool water. (Purification)
- Maintain a minimum of 10 FT of water over the spent fuel assemblies (Shielding).
- Can be utilized to drain or purify the refueling cavity during/ RWST post refueling operations.

Figure 14.4-1 SFP Cooling and Cleanup System



Design Heat Load

Condition 1-1/3 Core Offload 100 hr after S/D 20x10⁶ btu/hr (7.5 Hr to Boil, M/U 42 gpm)
 Condition 1 Full Core Offload 100hr after S/D 44x10⁶ btu/hr (3.4 Hr to Boil, M/U 95 gpm)

Design to Prevent Inadvertent Draining
 -No drains in the bottom of the pool
 -Anti-siphon holes in piping that goes down into pool ~ 7' below the surface and 12' above the top of the fuel

Design features which prevent inadvertently lowering water level

- No drains in the bottom of the pool
- Anti-siphon holes in piping that go down into the pool (~7' below pool surface and ~12' above the top of the fuel)