

**Figure 5a2.1-1 – Cooling Systems Heat Flow Pathway Diagram**

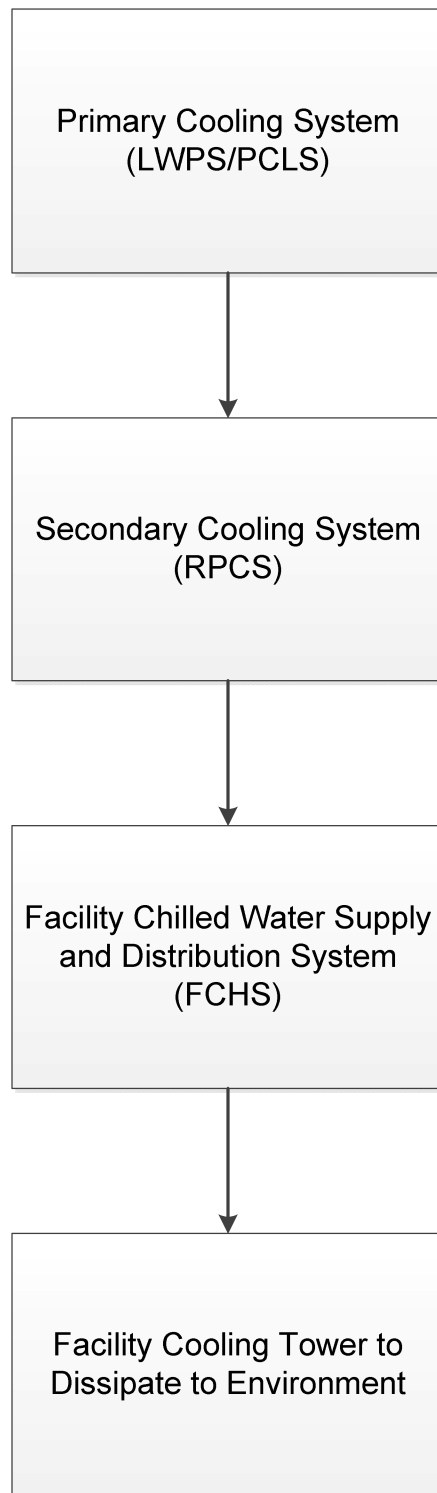
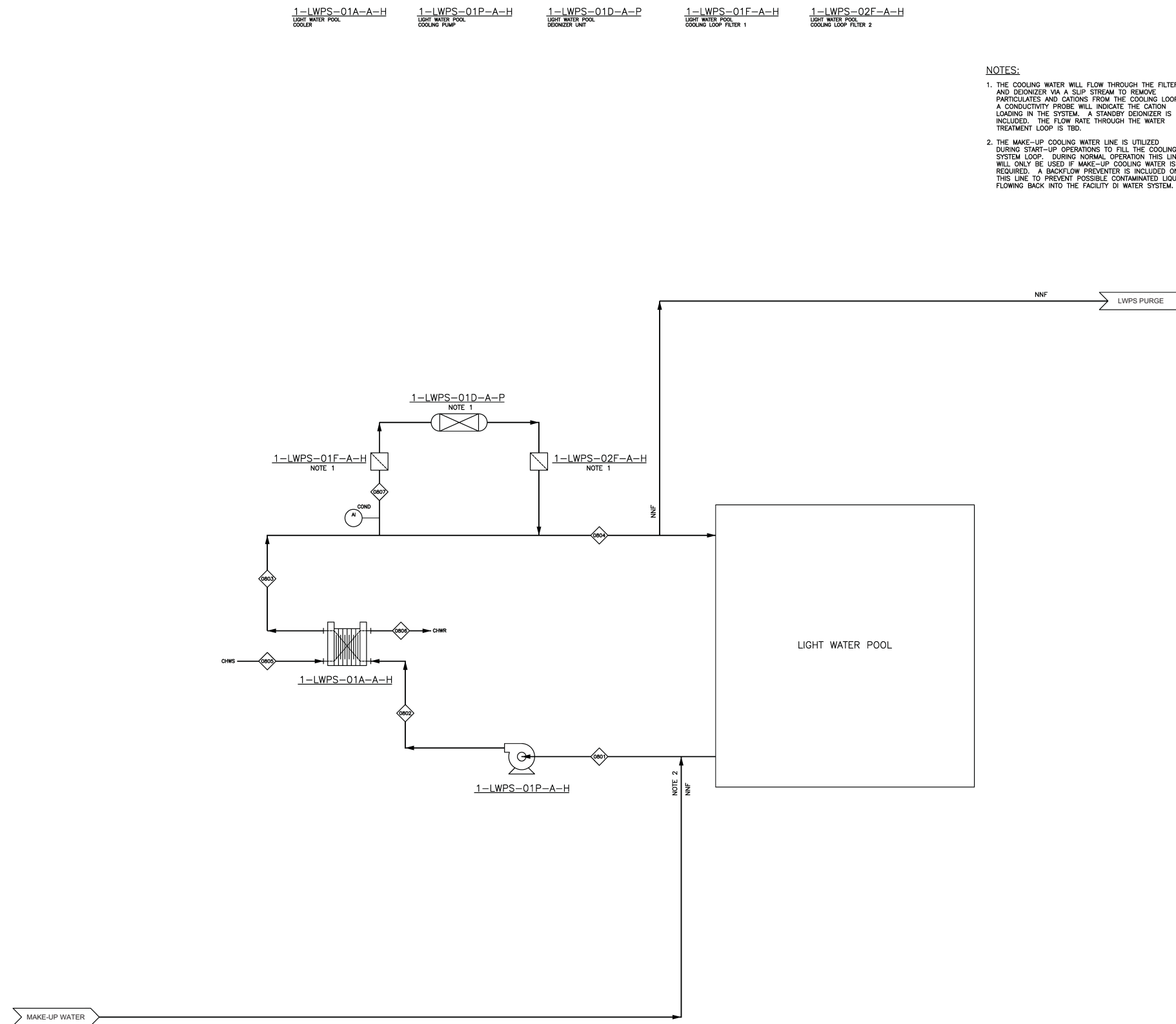


Figure 5a2.2-1 – LWPS Process Flow Diagram



NOTES:

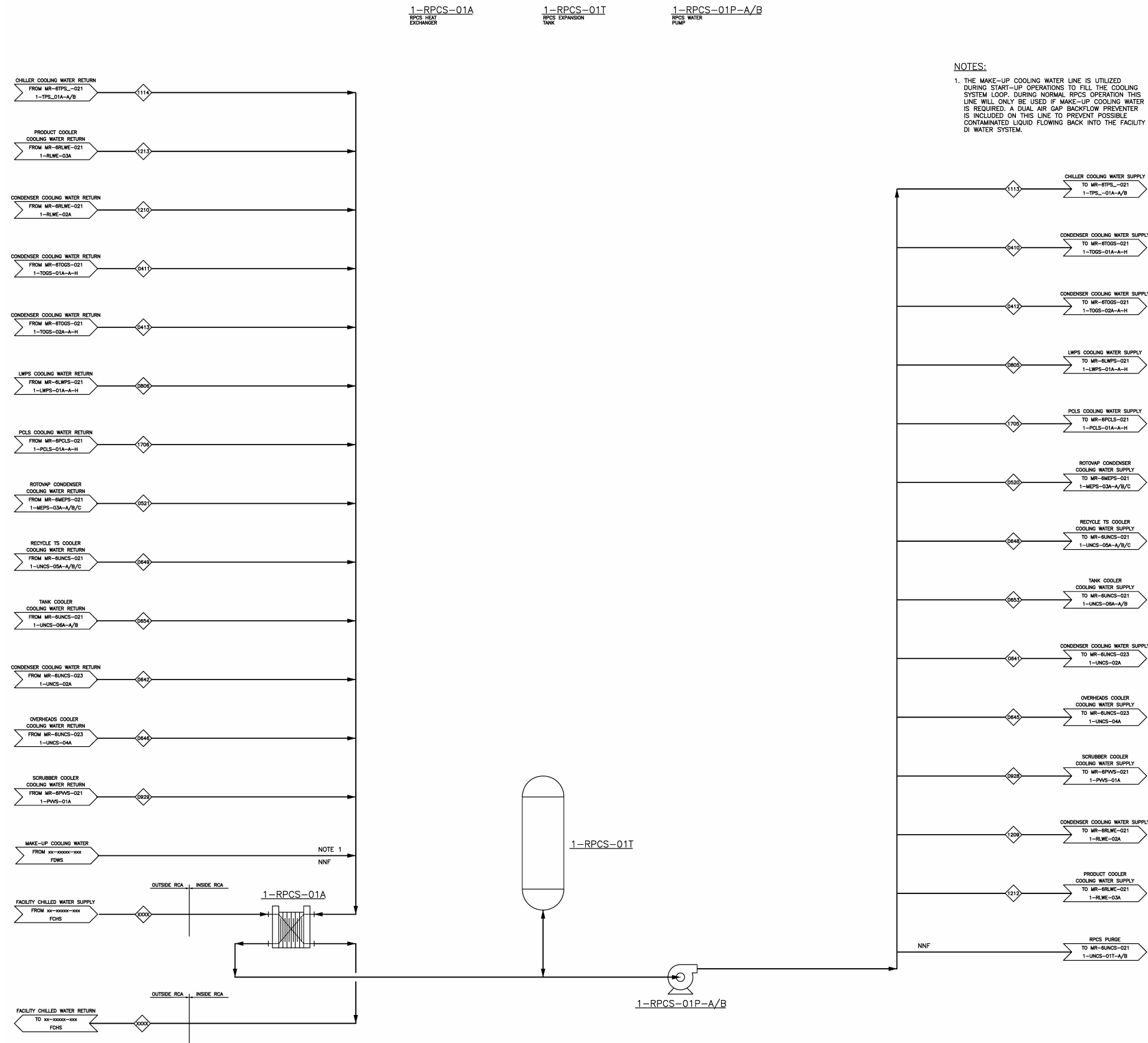
1. THE COOLING WATER WILL FLOW THROUGH THE FILTERS AND DEIONIZER VIA A SLIP STREAM TO REMOVE PARTICULATES AND CATIONS FROM THE COOLING LOOP. A CONDUCTIVITY PROBE WILL INDICATE THE CATION LOADING IN THE SYSTEM. A STANDBY DEIONIZER IS INCLUDED. THE FLOW RATE THROUGH THE WATER TREATMENT LOOP IS TBD.
2. THE MAKE-UP COOLING WATER LINE IS UTILIZED DURING START-UP OPERATIONS TO FILL THE COOLING SYSTEM LOOP. DURING NORMAL OPERATION THIS LINE WILL ONLY BE USED IF MAKE-UP COOLING WATER IS REQUIRED. A BACKFLOW PREVENTER IS INCLUDED ON THIS LINE TO PREVENT POSSIBLE CONTAMINATED LIQUID FLOWING BACK INTO THE FACILITY DI WATER SYSTEM.

DRAWING SCALE

**Figure 5a2.2-2 PCLS Process Flow Diagram**

*Proprietary Information – Withhold from public disclosure under 10 CFR 2.390(a)(4)*

Figure 5a2.3-1 – RPCS Process Flow Diagram



NOTES:  
 1. THE MAKE-UP COOLING WATER LINE IS UTILIZED DURING START-UP OPERATIONS TO FILL THE COOLING SYSTEM LOOP. DURING NORMAL RPCS OPERATION THIS LINE WILL ONLY BE USED IF MAKE-UP COOLING WATER IS REQUIRED. A DUAL AIR GAP BACKFLOW PREVENTER IS INCLUDED ON THIS LINE TO PREVENT POSSIBLE CONTAMINATED LIQUID FLOWING BACK INTO THE FACILITY DI WATER SYSTEM.

DRAWING SCALE

Figure 5a2.4-1 – Primary Coolant Cleanup Loop Flow Diagram

