PFR-154   Title: Warm Reset causes Cold Restart on DPC

Assembly : BAU	SubAssembly : FSW	
Component :	**Units Affected:**	**Units fixed:**
Originator: Ellen Taylor	- | x | - | - | -	- | x | - | - | -
Organization: Swales/UCB	**Date:** 3/16/06 (date found)	
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Failure Occurred During (Check one √)

□ Functional test   □ Qualification test   √ S/C Integration □ Launch operations □ Other (Flight Assy)

Environment when failure occurred:

√ Ambient	□ Vibration	□ Shock	□ Acoustic
□ Thermal	□ Vacuum	□ Thermal-Vacuum	□ EMI/EMC

Problem Description

During the FSW 3.003 acceptance testing at UCB on 3/16/06, a cold restart (power on restart) occurred every time a warm reset command was issued. The system was running off of DPC only.

Analyses Performed to Determine Cause

This issue was seen at Swales as well when running on DPC only. It does not occur if the battery is connected. Further investigation at Swales showed that the initial conditions after a warm restart were incorrect. The latch valve logic was inverted, and the latch valves were being open and closed after a warm restart causing approx 2A power draw, which is over the current limit of the DPC. See Swales PRB 0248 for more information.

Corrective Action/ Resolution

FSW V3.1 has fixed this problem. Probe 4 with BAU EDU and V3.1 FSW was delivered to UCB and tested on 5/3/06.

Acceptance:

MAM: Ron Jackson_____; MSE: Ellen Taylor_____

PM: Peter Harvey_____; Cognizant Engineer_____

Date of Closure_____