CDMU PM Reboot
File: H_CRP_DHS_1005.xls
Author: S. Manganelli

Procedure Summary

Objectives

The procedure is supposed to be run in the cases outlined in the Event Excel spreadsheet (in general when software behaviour is not as expected).

Summary of Constraints

According to the procedure we first try to restart the PM injecting a SW Alarm. If this does not work (because the SW does not process it) we switch OFF the in use PM leaving the RMs to react accordingly. This can lead to either a level 3 a or a level 3 b reconfiguration, so the PM in use at the end can be either the same or the other one.

Spacecraft Configuration

Start of Procedure

A problem on the current PM that is not being solved by on board autonomy

End of Procedure

Either a reset of current PM or a switchover to other PM

Reference File(s)

Input Command Sequences

Output Command Sequences

HRD1005A
HRD1005C
HRD1005D

Referenced Displays

ANDs **GRDs** **SLDs**

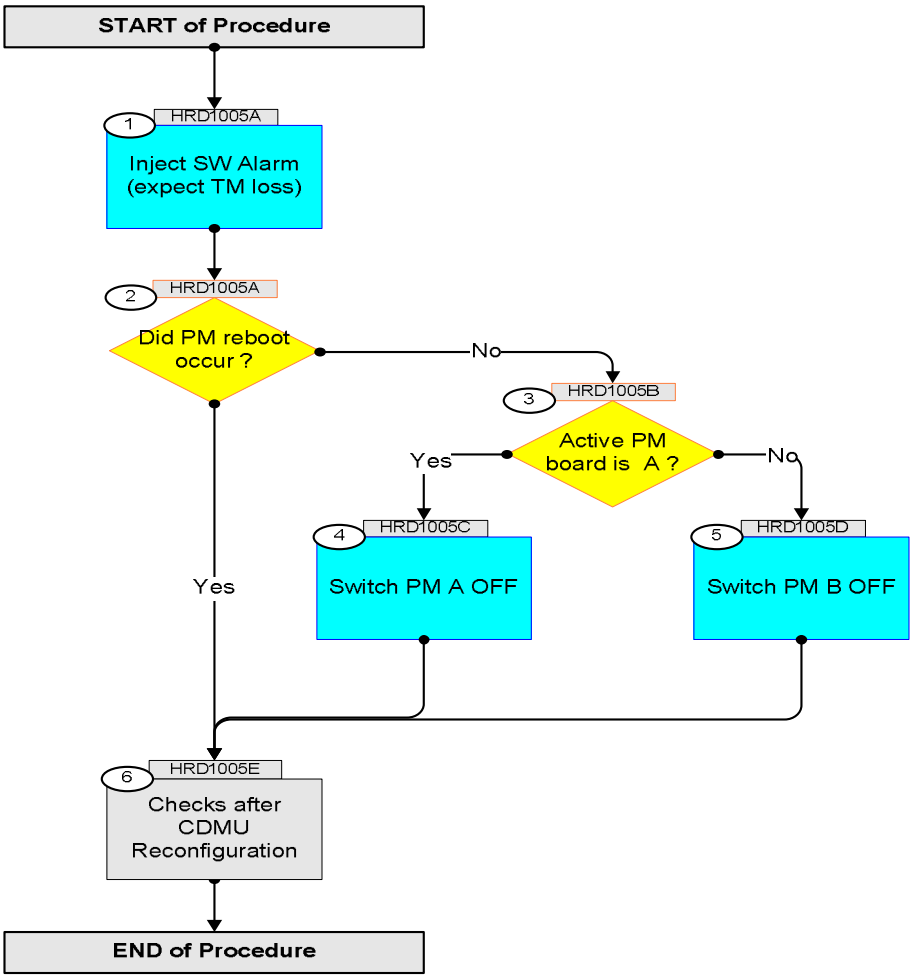
ZAZAA999

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
21/04/09	2.3	1	Created	S. Manganelli	
03/05/09	2.4	2	Modified by use of PM OFF TC rather than PM RESET TC, added some comments	S. Manganelli	
13/07/09	2.5	3	Inserted comments about delay in TM reacquisition after reconfiguration	S. Manganelli	

CDMU PM Reboot
File: H_CRP_DHS_1005.xls
Author: S. Manganelli

Procedure Flowchart Overview



CDMU PM Reboot
File: H_CRP_DHS_1005.xls
Author: S. Manganelli

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Beginning of Procedure			
	HRD1005A	*TC Seq. Name :* HRD1005A (Inject SW Alarm) *TimeTag Type:* *Sub Schedule ID:*			
1		Inject SW Alarm (expect TM loss)		Next Step: 2	
		Execute Telecommand **FdirSwAlarm** **DCN36170** *Command Parameter(s) :* **SwAlarmParam** **DH153170** **FdirManDeatDet** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : FDIR Recovery: SW Alarm TC(8,4,116,42)		**TC**	
		TM shall be unavailable until the end of the mode transition autonomous sequence completion. Due to operations on the TT&C amplifier and RFDN switches this shall take about three minutes.			
2		Did PM reboot occur ? type: [If]		Next Step: Yes 6 No 3	
		End of Sequence			
	HRD1005B	*TC Seq. Name :* HRD1005B (Dummy sequence) *TimeTag Type:* *Sub Schedule ID:*			
3		Active PM board is A ? type: [If]		Next Step: Yes 4 No 5	
		Verify Telemetry **Active_PM_Board** **DEDM1160**		AND=ZAZAA999	
		End of Sequence			
	HRD1005C	*TC Seq. Name :* HRD1005C (Reset PM A) *TimeTag Type:* *Sub Schedule ID:*			
4		Switch PM A OFF		Next Step: 6	

CDMU PM Reboot
File: H_CRP_DHS_1005.xls
Author: S. Manganelli

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Execute Telecommand **PM_A_off** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PM A off - High Priority Standard	**DCA51170**	**TC**	
		This will trigger an immediate reconfiguration via RM (matching either PAP 1 or PAP 2) due to PM Undervoltage.			
		TM shall be unavailable until the end of the mode transition autonomous sequence completion. Due to operations on the TT&C amplifier and RFDN switches this shall take about three minutes.			
		End of Sequence			
	HRD1005D	*TC Seq. Name :* HRD1005D (PM B OFF) *TimeTag Type:* *Sub Schedule ID:*			
5		Switch PM B OFF		Next Step: 6	
		Execute Telecommand **PM_B_off** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PM B off - High Priority Standard	**DCA67170**	**TC**	
		This will trigger an immediate reconfiguration via RM (matching either PAP 1 or PAP 2) due to PM Undervoltage.			
		TM shall be unavailable until the end of the mode transition autonomous sequence completion. Due to operations on the TT&C amplifier and RFDN switches this shall take about three minutes.			
		End of Sequence			
	HRD1005E	*TC Seq. Name :* HRD1005E (Checks after Reconfiguration) *TimeTag Type:* *Sub Schedule ID:*			
6		Checks after CDMU Reconfiguration type: [Proc]		Next Step: END	
		H_CRP_DHS_3046 Configuration check after level 3 or 4			
		End of Sequence			
		End of Procedure			