Redundant HPS switch ON
File: H_CRP_TCS_HPR1.xls
Author: E. Picallo

Procedure Summary

Objectives

This procedure describes the steps needed to switch ON a selected redundant Heater Protection Switches (HPSs) (from HPS10 to HPS18).

Summary of Constraints

The selected redundant HPS is switched ON through ASW TC(8,4,112,5); thus the status of the ASW function "PCDU Management" has to be "running".

Spacecraft Configuration

Start of Procedure

CDMU in default configuration;
Redundant HPS OFF.

End of Procedure

CDMU in default configuration;
Redundant HPSs switched ON, but the 6 heater control switches (HCSs) are OFF.

Reference File(s)

Input Command Sequences

Output Command Sequences

HRTHPR11
HRTHPR12
HRTHPR13
HRTHPR14
HRTHPR15
HRTHPR16
HRTHPR17
HRTHPR18
HRTHPR19

Referenced Displays

ANDs	GRDs	SLDs
WAHT2584		
WAHT3584		

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
24/07/08	1	1	Created	E. Picallo	
08/12/08	2	2	Display mode update	E. Picallo	

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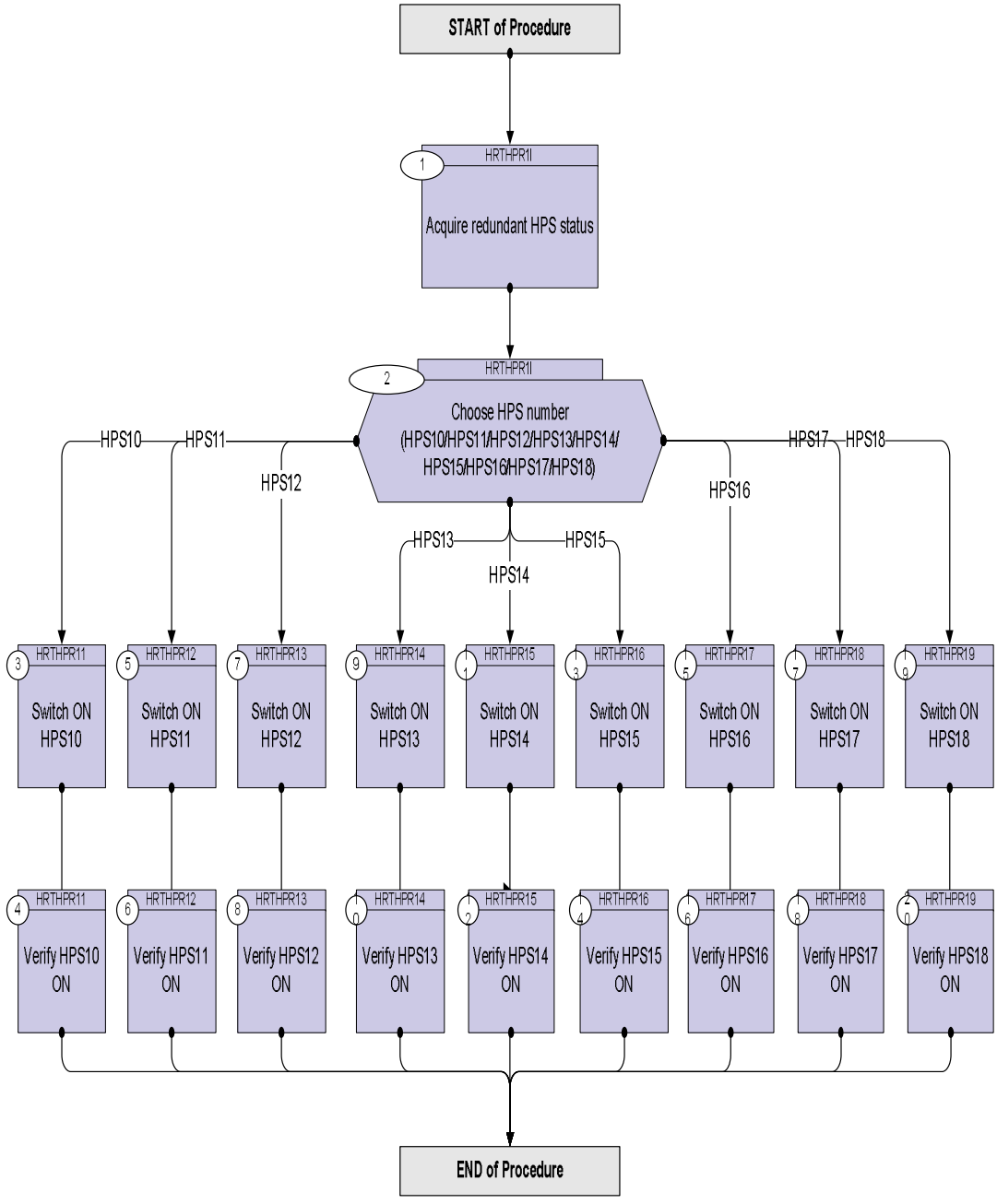
Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Beginning of Procedure		
		TC Seq. Name :HRTHPR1I (Red HPS switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
1		*Acquire redundant HPS status*		Next Step: 2
		Verify Telemetry **GRP10_HPS_STS WM62G565**		AND=WAHT2584
		Verify Telemetry **GRP11_HPS_STS WM62H565**		AND=WAHT2584
		Verify Telemetry **GRP12_HPS_STS WM72G565**		AND=WAHT2584
		Verify Telemetry **GRP13_HPS_STS WM72H565**		AND=WAHT3584
		Verify Telemetry **GRP14_HPS_STS WM82G565**		AND=WAHT3584
		Verify Telemetry **GRP15_HPS_STS WM82H565**		AND=WAHT3584
		Verify Telemetry **GRP16_HPS_STS WM92G565**		AND=WAHT3584
		Verify Telemetry **GRP17_HPS_STS WM92H565**		AND=WAHT3584
		Verify Telemetry **GRP18_HPS_STS WMA2G565**		AND=WAHT3584
2		*Choose HPS number (HPS10/HPS11/HPS12/HPS13/HPS14/HPS15/HPS16/HPS17/HPS18)*		Next Step: HPS10 3 HPS11 5 HPS12 7 HPS13 9 HPS14 11 HPS15 13 HPS16 15 HPS17 17 HPS18 19
		TC Seq. Name :HRTHPR11 (Red HPS10 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
3		*Switch ON HPS10*		Next Step: 4
		Execute Telecommand **PcduSwOnHps10** *TC Control Flags :* **GBM IL DSE --Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 10	**DCC10170**	
4		*Verify HPS10 ON*		Next Step: END
		Verify Telemetry **GRP10_HPS_STS WM62G565**	**= ON**	AND=WAHT2584
		TC Seq. Name :HRTHPR12 (Red HPS11 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
5		*Switch ON HPS11*		Next Step: 6
		Execute Telecommand **PcduSwOnHps11** *TC Control Flags :* **GBM IL DSE --Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 11	**DCC11170**	
6		*Verify HPS11 ON*		Next Step: END
		Verify Telemetry **GRP11_HPS_STS WM62H565**	**= ON**	AND=WAHT2584
		TC Seq. Name :HRTHPR13 (Red HPS12 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
7		*Switch ON HPS12*		Next Step: 8

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand **PcduSwOnHps12** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 12	**DCC12170**	
8		*Verify HPS12 ON*		Next Step: END
		Verify Telemetry **GRP12_HPS_STS** **WM72G565**	**= ON**	AND=WAHT2584
		TC Seq. Name :HRTHPR14 (Red HPS13 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
9		*Switch ON HPS13*		Next Step: 10
		Execute Telecommand **PcduSwOnHps13** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 13	**DCC13170**	
10		*Verify HPS13 ON*		Next Step: END
		Verify Telemetry **GRP13_HPS_STS** **WM72H565**	**= ON**	AND=WAHT3584
		TC Seq. Name :HRTHPR15 (Red HPS14 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
11		*Switch ON HPS14*		Next Step: 12

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand **PcduSwOnHps14** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 14	**DCC14170**	
12		*Verify HPS14 ON*		Next Step: END
		Verify Telemetry **GRP14_HPS_STS** **WM82G565**	**= ON**	AND=WAHT3584
		TC Seq. Name :HRTHPR16 (Red HPS15 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
13		*Switch ON HPS15*		Next Step: 14
		Execute Telecommand **PcduSwOnHps15** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 15	**DCC15170**	
14		*Verify HPS15 ON*		Next Step: END
		Verify Telemetry **GRP15_HPS_STS** **WM82H565**	**= ON**	AND=WAHT3584
		TC Seq. Name :HRTHPR17 (Red HPS16 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
15		*Switch ON HPS16*		Next Step: 16

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand **PcduSwOnHps16** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 16	**DCC16170**	
16		*Verify HPS16 ON*		Next Step: END
		Verify Telemetry **GRP16_HPS_STS** **WM92G565**	**= ON**	AND=WAHT3584
		TC Seq. Name :HRTHPR18 (Red HPS17 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
17		*Switch ON HPS17*		Next Step: 18
		Execute Telecommand **PcduSwOnHps17** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 17	**DCC17170**	
18		*Verify HPS17 ON*		Next Step: END
		Verify Telemetry **GRP17_HPS_STS** **WM92H565**	**= ON**	AND=WAHT3584
		TC Seq. Name :HRTHPR19 (Red HPS18 switch ON) *TimeTag Type: N* *Sub Schedule ID:*		
19		*Switch ON HPS18*		Next Step: 20

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand **PcduSwOnHps18** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On HPS 18	**DCC18170**	
20		*Verify HPS18 ON*		Next Step: END
		Verify Telemetry **GRP18_HPS_STS** **WMA2G565**	**= ON**	AND=WAHT3584
		End of Procedure		