4.6_V2.1 TURN OFF DPA A (realtime version)

Last Revised: March 25, 2016
Filename: dpaa_off

BRIEF FUNCTIONAL DESCRIPTION:
This is an "atomic" procedure which simply turns off the DPA side A. It should be safe to execute under any condition except a spacecraft power or thermal emergency. The telemetry verifiers for the "Enable" and "On" can be confusing depending on if either side of the DPA was on before the procedure started. If only side A was on before the procedure, the Enable and On will read Enabled and On even after the off command had been executed. If side B was on before, during and after this procedure, the Enable and On will change state to Disabled and Off at the end of this procedure. Therefore, the only sure way to tell is to check the input current and the DPA 5V.

The sequence of actions will be:

1. turn off and disable DPA power supply side A

ASSUMED INSTRUMENT STATE:
Assumes that the PSMC has power from the spacecraft.
The FEPs for side A (# 0,1,2) should be off.

SPECIAL INITIAL CONDITIONS:

OPERATIONAL CONSTRAINTS/CAUTIONS:

REFERENCES:

CHANGE HISTORY:

V1.2

- changed filenames from "turnoff_dpaa" to "dpaa_off"
- added text to explain the confusion with the logical verifiers

V1.3

- changed primary verifier to be the DPA +5 V supply
- changed TLM FMT to 1,2,4or6
- changed expected value of DPA A Input Voltage to 28.0–34.0 V

V2.0

- ACIS Team signed-off version, identical to previous version 1.3

V2.1

- Update expected 1DP28AVO range

- Changed formatting of “Tlm Fmt” in table
- Changed format of time column in table
- Changed text in table column “Description”

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Table 1: **TURN OFF DPA A (realtime version)(Page 1)**

Step #	**Title (Revision 4.6_V2.1)**	**Time (mins)**	**Command Description**	**Command Mnemonic**	**Telemetry Description**	**Telemetry Mnemonic**	**Expected Value**
1	**Turn off DPA A**						
1.1	Turn off DPA PS A	2	DPA PS A Off	1DPPSAOF	DPA A ON/OFF DPA Input V DPA Input I DPA +5V	1DPPSA 1DP28AVO 1DPICACU 1DPP0AVO	OFF 25.0–34.0 0 0
1.2	Disable DPA PS A	1	DPA PS A Dis	1DPPSADS	DPA A ENB/DIS	1DPPSAX	DIS
	Total Time:	3					

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Step #	Units	Telemetry EGSE	Other Verifier	Crit	Description	Notes	RT Con	Tlm Fmt	Min Alt	SIM Pos
1										
1.1				2	Ignore if DPA unpowered			1,2,4,6		
	V			2	Expect 0 W for side A, power consumption					
	A			2	should be more stable than I or V.					
	V			1						
1.2					Ignore if DPA unpowered			1,2,4,6		