HESSI SPACECRAFT
POWER OFF PROCEDURE

HSI_MIT_011C
2000-NOV-15
DAVE CURTIS

DRAFT

As Run on: ____________________________ (Date/Time)

By ____________________________ (Test Conductor)
## DOCUMENT REVISION RECORD

<table>
<thead>
<tr>
<th>Rev.</th>
<th>Date</th>
<th>Description of Change</th>
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<tr>
<td>B</td>
<td>2000-11-14</td>
<td>Add procedure for removing BFP</td>
</tr>
<tr>
<td>C</td>
<td>2000-11-15</td>
<td>Replace reference to SAI proc with HSI_MIT_049</td>
</tr>
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</table>

Western Range/NASA Safety: ____________________________________________  
Date

Project Manager: ____________________________________________  
Peter Harvey  
Date

System Engineer: ____________________________________________  
David Curtis  
Date

QA: ____________________________________________  
Ron Jackson  
Date
1. INTRODUCTION

1.1 Purpose
This document describes the normal HESSI spacecraft power-off sequence to shut off the spacecraft after testing.

2. TEST PROCEDURE

2.1 Instrument Power Down
a. Start the "IPMT_OFF" ITOS procedure. Verify IPMT_HVDAC in the PMT ITOS page is set to zero. ______OK
b. Start the "IPD_OFF" ITOS procedure. Verify IPDHVDAC is set to zero in the Particle Detector ITOS page ______OK
c. Start the "IHV_OFF" ITOS procedure. Verify IDPU_P28HV on the IDPU Analogs ITOS page is less than 1V. ______OK
d. Start the "IMGR_OFF" ITOS procedure. Verify that the 5 IADP_PWR settings on the ADP ITOS page are all OFF ______OK
e. Start the "IDIB_OFF" ITOS procedure. Verify that the voltages on the IDIB ITOS page are all less than 1 volt. ______OK
f. Verify that the ICRYOMAIN and ICRYOBAL values on the ITOS Spectrometer Power page read zero. DO NOT PROCEED OTHERWISE ______OK
g. Start the "SC_CPCOFF" ITOS procedure. Verify the Cryocooler status on the PCBINTERFACE page indicates OFF ______OK
h. Start the "SC_IDPU_SPWROFF" ITOS procedure. Verify the IDPU +28V status on the PCBINTERFACE page indicates OFF ______OK
i. Start the "SC_IDPUOFF" procedure. Verify the IDPU status on the PCBINTERFACE page indicates OFF ______OK

2.2 Spacecraft Power Down
This section powers off the SSR
a. In the “PCB Interfaces” ITOS telemetry display window command off the SSR by clicking on the SSR “OFF” button. Verify that the status indicator for the SSR changes to “OFF.” ______OK
This section commands off all of the ACS components at the conclusion of the testing and powers down the spacecraft.

b. In the “PCB Interfaces” ITOS telemetry display window command off the magnetometer by clicking on the Magnetometer “OFF” button. Verify that the status indicator for the magnetometer changes to “OFF.” ______OK
c. In the “PCB Interfaces” ITOS telemetry display window command off the fine sun sensor by clicking on the FSS “OFF” button. Verify that the status indicator for the FSS changes to “OFF.” ______OK
d. In the “PCB Interfaces” ITOS telemetry display window command off the power to the ADB X and Z1 torque rod drivers by clicking on the Torque Rod
XZ “OFF” button. Verify that the status indicator for the Torque Rod XZ changes to “OFF.” ______OK

d. In the “PCB Interfaces” ITOS telemetry display window command off the power to the ADB Y and Z2 torque rod drivers by clicking on the Torque Rod YZ “OFF” button. Verify that the status indicator for the Torque Rod YZ changes to “OFF.” ______OK

e. In the “PCB Interfaces” ITOS telemetry display window command off NEB1 by clicking on the NEB1 “OFF” button. Verify that the status indicator for NEB1 changes to “OFF.” ______OK

f. If the BFP is installed:
   - Adjust the TAC voltage so that the battery current reads zero on the PACI page
   - Remove the BFP

g. Power down the spacecraft per HSI_MIT_049, “Spacecraft Power On/Off Standard Operating Procedure,” Section 3.3. ______OK

Completed date/time: __________________