<table>
<thead>
<tr>
<th>Interface Type</th>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical</td>
<td>Flight operations through the RockSat-X Power Connector</td>
<td>Connector Type: 15 Pin Cannon (D-Sub)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gender: Male (pins)</td>
</tr>
<tr>
<td>Constraints</td>
<td>Payloads not meeting these specifications</td>
<td>Current: GSE and Timed Event lines are limited by WFF. Please see the diagram tab for clarification on limits.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flight Power Off: All decks will lose power at T+6 minutes (~330 seconds)</td>
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<td></td>
<td></td>
<td>Capacity: Every full payload space has been allotted their own 1 Ah battery.</td>
</tr>
<tr>
<td>Electrical, Ground (GND)</td>
<td>Wallops shall supply a current return ground connection.</td>
<td>Pins: 5 - 8 and 12 - 15 on RS-X Power Connector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Max Current: 1 Amp max per line</td>
</tr>
<tr>
<td>Electrical, Ground Support Equipment (GSE)</td>
<td>Wallops shall supply power lines capable of activation prior to launch, which should be taken into consideration in electrical design.</td>
<td>Pins: 1 and 9 on RS-X Power Connector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Voltage/Polarity: 28 +/- 6 V nominal per line</td>
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<tr>
<td></td>
<td></td>
<td>Max Current: See diagram on &quot;Diagram&quot; tab</td>
</tr>
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<td></td>
<td></td>
<td>Special Considerations for GSE lines: All go active at T-3 and remain active for duration of flight. Also, see additional comment above.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GSE 1 Activation Time Prior to Launch: From T-10 to T-3 minutes (Customer Defined)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GSE 2 Activation Time Prior to Launch: From T-10 to T-3 minutes (Customer Defined)</td>
</tr>
<tr>
<td>Electrical, Timed, Non-redundant (TE)</td>
<td>Wallops shall supply three non-redundant lines capable of activation post launch</td>
<td>Pins: 4, 10, and 11 on RS-X Power Connector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Voltage/Polarity: 28 +/- 6 V nominal per line</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Max Current: See diagram on &quot;Diagram&quot; tab</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TE-1 Activation Time Post Launch (Dwell time): From T+0.1 to T+4 minutes (Customer Defined) with Dwell Time from 1 second to flight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TE-2 Activation Time Post Launch (Dwell time): From T+0.1 to T+4 minutes (Customer Defined) with Dwell Time from 1 second to flight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TE-3 Activation Time Post Launch (Dwell time): From T+0.1 to T+4 minutes (Customer Defined) with Dwell Time from 1 second to flight</td>
</tr>
<tr>
<td>Electrical, Timed, Redundant (TE-R)</td>
<td>Wallops shall supply a single redundant line capable of activation post launch</td>
<td>Pins: 2 and 3 on RS-X Power Connector (Customers connect together)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Voltage/Polarity: 28 +/- 6 V nominal per line</td>
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<tr>
<td></td>
<td></td>
<td>Max Current: See diagram on &quot;Diagram&quot; tab</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TE-R 1 Activation Time Prior to Launch (Dwell time): From T+0.1 to T+4 minutes (Customer Defined) with Dwell Time from 1 second to flight</td>
</tr>
</tbody>
</table>

Wallops will activate the GSE lines during environmental and other testing on the rail prior to launch, which should be taken into consideration in electrical design.

All decks will lose power at ~T+6 minutes (~330 seconds).

Each full payload space has been allotted their own 1 Ah battery.

From T+0.1 to T+6 minutes (Customer Defined) with Dwell Time from 1 second to flight.

Date: 2/20/2019