

**Solar Probe Plus (SPP)  
Payload L3 Requirements Peer Review  
24 May 2013**

**Action Item Request**

**Item No. PAY-85**

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**Area of Concern/ Presenter:** Requirement wording does not reflect the latest input from EPI-Lo.

**Action/ Recommendation/ Concern:**

Update the wording of the requirement to:

“EPI-Lo shall be capable of measuring energy spectra and angular distributions for energetic electrons from 0.05 MeV to 0.5 MeV (TBR) for solar energetic particle event intensities up to at least  $10^6$  particles/cm<sup>2</sup>-sr-s (TBR), except when penetrating particles induce a background counting rate greater than 50% (TBR) of the foreground rate.”.

**Note: we will need to further refine the wording following the discussions that took place during the review and to ensure that the requirement is verifiable.**

**Rationale:**

Although particles (we are primarily concerned with electron background) at these energies are typically much lower intensity than in our foreground energy range, the geometry factor for detection of the penetrators is much larger (of order a factor of 500). Therefore for "hard" spectra (in which there are a lot of high energy particles) we can be swamped by background.