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Reconfigurable Payload Power Management System for Rockets

In general, a rocket's onboard systems, including payloads, must be harmonized within the overall system. In some cases, payloads with an autonomous power system, including batteries, must be activated shortly before or after launch to keep the mission active for the required time. The sizing of power switches must be done according to the power requirements of the payloads, and it is also necessary to size the connections between the parts to limit issues related to ground loops. If the payload specifications change, reconfiguring or resizing the Power Management System (PMS) board may be necessary, but it is not strictly required.

The proposed system has been designed to be reconfigurable and geometrically symmetric to maintain the center of mass on the rocket's symmetric axis. Once inserted into the rocket's nose cone, the system is completely powered off and can be activated remotely using a wireless system. Once activated, the Payload Power Management System (PMS) will be able to receive RF instructions and activate or deactivate payloads according to mission requirements.

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None

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Yes, I ACCEPT

Primary author: MARIOLA, Marco (University of KwaZulu-Natal)

Co-author: Mr SWANEPOEL, Tyrone (Aerospace Systems Research Institute)

Presenter: MARIOLA, Marco (University of KwaZulu-Natal)

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