The Power Subsystem (PWR) is responsible for the generation, distribution, and regulation of power throughout the spacecraft. A power generation analysis examining a best case scenario (where the surface with the most solar panels is fully exposed) and a worst case (where the surface with the least solar panels is fully exposed) was performed considering several solar panel configurations. The analysis assumed an average solar intensity of 1350 W/m2, a loaded circuit voltage of 2.31 V per cell, and a solar cell efficiency of 27%. The cells were connected in series with seven cells per panel. Four solar panel configurations were considered.

Configuration 1 had six body mounted solar arrays with a maximum power generation of 5.1 W\*hr / orbit, though the lack of deployable panels significantly reduces integration and maneuver complexity.

Configuration 2 had six body mounted solar arrays with four deployable panels such that two panels would be incident to sunlight on four of the six sides. This configuration generated a maximum of 10.2 W\*hr / orbit.

Configuration 3 had six body mounted solar arrays and two deployable arrays such that three panels would be incident to sunlight on one side of the spacecraft. Configuration 3 was less complex than Configuration 2 and generated 17.2 W\*hr / orbit, though it would require active attitude control to keep the arrays pointed at the sun for the best case scenario.

Configuration 4 assumed one body mounted array with five deployable arrays such that all six panels could be incident to the sun at the same time. This configuration would require sun-tracking and be the most complex for integration and maneuvering, though it also generated the most power with 30.6 W\*hr / orbit in a best case scenario.