The technology proposed in this project employs The Spherical Sun Power Generator which concentrates the diffused sunlight to a hybrid collector (Photo voltaic and thermal solar cells). The system is equipped with a dual axis tracking system that tracks the passage of the sun throughout the day. The geometry and the optical properties of the spheres act like magnifying glasses thereby reducing the silicon cell area to 25%. It can reach an efficiency level of 57% in hybrid mode. The spherical lens can also function during the night, utilizing the light from the moon to generate power. At night time, the spherical lens transforms into high-power lamps that illuminates the site by using a few LEDs.

POWER GENERATION MECHANISM



