

Solar Power for Ranger Post

The challenge: The Ranger Posts in National Parks are often unconnected to the grid. This means there is no power for lighting or communication. This impacts negatively on the operations, and the quality of life, of staff at the post. They are out of touch with Park authorities and with their families and without the lighting required to ensure their safety and security.

The solution: A basic solar system can provide the electrification required at the Ranger Post.

The technology: Solar panels convert sunlight into electricity. DC power generated by the solar panels is converted into AC power using an inverter. This AC power is used to operate equipment and provide lighting. To ensure the system functions at night and during periods without sunlight, there is a battery for backup.

Illustrative output: A 1-2 kilowatt-peak (kWp) solar system can generate sufficient power for a Ranger Post.

Lifespan? @15 years.

Why provide solar electricity to a Ranger Post?

- ✓ Efficient, effective and environmentally friendly option.
- ✓ Can operate in off-grid locations.
- ✓ Cheap to run and maintain.
- ✓ Improves safety and security of staff based at the Ranger Post.
- ✓ Improved communication may assist with anti-poaching activities.

