



energy

Department:  
Energy

REPUBLIC OF SOUTH AFRICA

## QUALITY OF SERVICE

The Rural Energy Service Provider shall, to the extent not provided for in this Schedule, comply with the Quality of Service Standard (NRS070:2004) and or its amendments.

Compliance with SATS 1286 for locally manufactured goods is critical.

Components of PV systems offered, must have a minimum total local content threshold value of 70% by price.

All components must be accompanied by test reports conducted by independent test houses. e.g. light output and power consumption.

Solar panels are subject to independent, output flash testing.

Charge controllers are subject to testing in accordance with NRS 052.

Aesthetics are important. As an example, bare lamps hanging on a wire suspended from the roof, should be covered by a lamp shade.

Exposed wire fixed to a wall must be straight both vertically and horizontally.

Wall mounted switches indicating on/off positions are preferred. Pull switches are not common in modern housing, thus not acceptable as an alternate in our non-electrified traditional housing.

### SHS size

- Indoor lighting comprising of 6 x lights for 4 hrs/day
- Outdoor lighting of 2 x external lights for 12 hrs/day
- Energy for 1 x DC colour TV for 5hrs/day
- 2 x DC socket outlets providing energy for cell-phone charging (4hrs/day), audio-visual appliances and TV, or other small appliances (radio for 4hrs/day).
- Cable for aerial extension of energy to one external building. The external building will be supplied with at most 2 x indoor lights and 1 x outdoor light (and these lights are taken from the indoor and outdoor light quantities already mentioned above

Solar photo-voltaic system to supply the above service will include the following at a minimum:

- Solar photovoltaic array of 95-100Wp minimum power
- Electrical storage battery of minimum capacity 12V 96-100Ah
- Charge controller compatible with the array and battery
- 6 x DC LED internal ambient lamps , 3W maximum, minimum light output of 80 lumen/watt, minimum life of 15,000hrs
- 2 x DC LED external bulkhead lamps, 3W maximum, minimum light output of 80 lumen/watt, minimum life of 15,000hrs
- 2 x 7A DC socket adaptors ( 12V cigarette lighter type, suitable for DC TV and DC cell-phone chargers, (or possibly for small dedicated inverter for DSTV, although DC powered DSTV units are now available)
- 1 x DC cell-phone charging adaptors kit for all general cell-phones (cigarette lighter type)
- 1 x 9v outlet for radio
- A wiring kit of appropriate size for all DC wiring.
- Balance of system materials including: array mounting structure, battery box, battery fuse, control cubicle, light switches, and User Manual.

