General Notes

Miscellaneous...

Solar panel stuff

solar_power_system_calc.txt

```
- inverter?
- battery?
- solar panel?

1) load calculation
- assume 4x25w led light, 2x80w fan, 1x40w tube light, 1x50w tv
- total power = 100w + 160w + 40w + 50w = 350w

2) inverter selection
- load = 350w (oonsider: 500w)
- recommended: 800w-1000w

3) battery selection
- assume 12v dc battery
- for 350w ac load, i(dc) = 350w/12v = ~30a
- assume battery operation of 8h
- battery capacity = 30a x 8h = 240ah
# 250ah battery available!

4) battery charging current calculation
- assume 250ah
- charging current = ~10% current rating (Ah)
- charging current = 25A

5) solar panel selection
- solar panel current = charging current + load current = 25 + 30 = 55A
- solar panel power = 12v x 55A = 660W
- solar panel options: 125w / 180w / 375w / 440w
- solar panel count = 660W / 180W = ~4!
```