TIPS TO DECIDE

Category Name: Solar Panel

<u>Basic Purpose:</u> To reduce power consumption from the grid/Diesel generator and use renewable energy. Going green by installing Solar Panel.

Points to remember while purchase

a. Check expected panel efficiency?

(**Note:** general efficiency of panel is 60-80%. Can go up by 10% if MPPT controllers are used) b. No. of units of power that will be generated in a day.

(**Note:** For each region there is a thumb rule of power generation. Ex TN avg will be 3-4 units/day.) This is a good test of vendor knowledge

c. Shelf Life or warranty in general for solar panels are 20 years and the components are 5 years.

General Price Range:

Generally per Kilowatt (KW) the rate is 65K-1Lakh.

Note: This is a stable system so not much AMC involved, unless under special circumstance.

Caution:

- 1) If the price is negotiated harder, lower watt panel is provided.
- 2) The controllers do not have display units for viewing of total power consumed.
- 3) Vendors might recommend DC motors for Solar pumps.
- 4) A trained system integrator is required from the institution in case of any emergency.

Areas Of Application:

- 1) Roof top installation for regular grid connection.
- 2) Usage wise it can be across the campus for any electrical equipments

Certifications involved:

1) ISC, TUV, UL, IEC, MNRE certificate