



6.Cables:

The two main materials used to make solar farm wiring is copper and aluminium. Copper is more conductive than aluminium, which means a copper wire carries more current than an aluminium wire of the same size. Aluminium wiring is also more vulnerable to bending and flexing during installation, which can weaken it faster than copper wire. Another challenge with aluminium wire is the higher maintenance costs. Aluminium is more susceptible to temperature extremes. The expansion and contraction of the metal will require a technician to periodically tighten the terminals where aluminium is used. The main benefit to using aluminium is that the up-front cost is cheaper than copper.

7.Battery:

The Sun is not always available and it is not regular. However, loads are to be fed any time of the day. Therefore, power should be stored in a battery bank. Low maintenance Lead acid battery as per IRS: S 88/2004 or latest of specified capacity will be provided. The capacity of this battery bank is given in Ampere-Hour (AH) and bus bar voltage. The bus-bar voltage is decided by the voltage requirement of the load.



8.Grid-Support:

Solar-grid integration is the technology that allows large scale solar power produced from PV or CSP system to penetrate the already existing power grid. This technology requires careful considerations and attention including in areas of solar component manufacturing, installations and operation.