



Proposed Solar power based EV charging stations layout at Udyog Bhavan, Delhi

A. Description:

BHEL Corporate R&D is setting up a 3 kWp, 5KWp and 10KWp solar powered electric vehicle charging station at Delhi. The tentative layout of the site (top view) is given in fig-1 titled “Proposed Solar power based EV charging stations layout at Udyog Bhavan, Delhi”. It consists of 3KWp solar panels (total 9 panel divided in 3 columns and each column consists of 3 panels), 5KWp solar panels (total 18 panels divided in 6 columns and each column consists of 3 panels), 10KWp solar panels (total 36 panels divided in 12 columns and each column consists of 3 panels) and one inverter/battery room (Size: 3m x 3m x3m).

Area proposed for installing 3KWp, 5KWp and 10KWp solar panels is marked as Location A, Location B and Location C respectively. From fig(1), it is clear that the horizontal distance between mounting structure of two consecutive row panels is 3.2. The panel should be mounted at the height of 2.5m at an inclination of 28.6 deg. facing towards south. “Location A&B” is proposed for EV charging/Parking i.e charging points will be provided in this location as shown in fig-2. Details of EVs for which charging station proposed are given below.

1. Two Wheelers – 12 Nos
2. Four Wheeler – 3 Nos.

B. BHEL Scope:

Inverter panels, PV modules and batteries will be supplied by BHEL.