

**ANNEXURE: IV**  
**Estimate for solar electrification in KGBV-IV**  
**10 kW Hybrid Solar System**

SI	Description of Items	Unit	Quantity	Rate	Amount
1	Design, Supply & Installation of SPV modules of 335 WP (Poly/ Mono Crystalline silicon cells, each module 60/72 cells). Make: BIS & MNRE approved with IEC61215 certification (30 No's).	Set	30	8,280.00	2,48,400.00
2	Design, supply & Installation of Power Conditioning Unit (PCU, Hybrid) inbuilt MPPT charge controller with Remote monitoring Systems necessary switchgears, indicators etc. of 10 KVA set capacity with automatic changeover. Make MNRE approved brand and NABL tested.	Set	1	1,56,000.00	1,56,000.00
3	Design, supply & Installation of fire resistant 20 nos. MP/VRLA (GEL type C/10)/LMLA battery bank/Lead Acid Battery of 200Ah/ 12v with 5 years warranty. Make MNRE approved brand and tested by NABL lab	Set	20	16,000.00	3,20,000.00
4	Design, supply & installation of module mounting structure at faxed tilt with hot dip galvanized (min 80 micron) structure to withstand wind speed of 200 KMPH and fitted with antitheft nut blot. Height of structure= minimum 1.2m from existing ground level with necessary concrete foundation, Barbed wire fencing with intermediate MS angle post around the SPV modules.	Set	1	2,01,510.00	2,01,510.00
5	Supply & Installation of LT Power connecting armored cables, single/multi stranded copper conductor, XLPE insulated with 5 PVC compound etc. as required as per MNRE/BIS set specification. Module to module connection with 4 sq. mm ISI approved copper conductor.	Set	1	97,200.00	97,200.00
6	Supply & Installation of Earthling Equipment and lighting Arrester of genuine make, (with Super Earthling Kit: AC-1, DC set 1. Lighting Arrestor-01 No) as per IS/IEC	Set	1	17,540.00	17,540.00
7	Supply & Installation of Other Balance of system of genuine make like MCBs, Pipes etc. as required as per IS/IEC	Set	1	44,890.00	44,890.00
8	Supply & Installation of battery Rack, ACDB, DCDB and any Junction Box including surge protection as per IS/IEC	Set	1	68950.00	68,950.00
9	Annual maintenance for five years	Lump sum	5	9000.00	45,000.00

**Total: 11, 99,490.00**  
**Say Rs.12, 00,000.00**  
**Rupees twelve lakh only**

*Ram*  
*22/11/23*