GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA UNSTARRED QUESTION NO. 991 ANSWERED ON 08/02/2024

SOLAR POWER ELECTRIFICATION SCHEME

991. SHRI MARGANI BHARAT

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the number of Particularly Vulnerable Tribal Groups (PVTGs) habitations/households in Andhra Pradesh likely to be covered under a new solar power electrification scheme along with the details of allocated budget thereunder during the year 2023-24;

(b) whether the Government ensures successful implementation of the said scheme in remote and challenging locations within Andhra Pradesh;

(c) if so, whether any support mechanisms are available for capacity building and training of local communities and if so, the details thereof;

(d) the details of technical specifications for the off-grid solar power kits to be installed in Multipurpose Centres (MPCs);

(e) whether the Government proposes to adapt these specifications based on regional needs and weather conditions prevailing in Andhra Pradesh; and

(f) if so, the details thereof?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER (SHRI R.K. SINGH)

(a) The Ministry of New and Renewable Energy (MNRE) has sanctioned a proposal received from Andhra Pradesh Eastern Power Distribution Company Limited (APEPDCL) under the New Solar Power Scheme (for PVTG habitations/villages), which covers electrification of 756 PVTG Households (HHs) in 41 habitations of Alluri Seetharamaraju and Eluru districts of Andhra Pradesh with estimated project cost of Rs. 3.78 Cr.

(b)&(c) For successful implementation of the Scheme, MNRE has issued detailed Implementation Guidelines on 4.1.2024 having provisions for comprehensive maintenance of installed solar systems for 5 years from the date of commissioning, operation of service centre with sufficient tools & spares in every district of installation of systems, providing necessary training to the local people, etc.

(d)to(f) The Scheme Implementation Guidelines issued on 4.1.2024, inter alia, include specifications and technical requirements of the off-grid solar power pack for the Multipurpose Centres (MPCs). Details of these specifications are placed at **Annexure**.

The design and capacity of solar power pack to be installed at an MPC would depend upon the local requirements and other conditions including the weather conditions such as solar radiations available, wind speed, etc.

Specifications and Technical Requirements of the Off-grid Solar Power Pack for the Multi-Purpose Centres (MPCs)

Off-grid Solar Power Plant - The capacity of SPV modules and battery bank of Off-grid solar power plants to be proposed after a detailed survey of the load requirement at MPCs.	
SPV Module	a) Indigenous mono crystalline SPV modules shall be used with a minimum efficiency of 19% and a fill factor of more than 75%.b) The SPV Modules must be warranted for output wattage, which should not be less than 90% of the rated wattage at the end of 10 years and 80% of the rated wattage at the end of 25 years.
Battery	a) Tubular Valve Regulated Lead Acid (VRLA) Gel type battery bank with a maximum of depth of discharge (DoD) of 80%.b) The battery bank shall be designed for two-day autonomy of the average daily load cycle.
Street Light	7W LED street light
Remote Monitoring System	All the important remote monitoring parameters (as specified by the implementing agency tenders) are available over the internet using GPRS (2G/3G/4G enabled) based solutions. The RMS shall be able to push the information to the web server for every 15 minutes even under the 2G networks. Vendor shall host the RMS information in the new or already running web portals of MNRE or implementing agencies.
Balance of Plant	PV Module mounting structures, PCU/Solar Inverter with charge controller (MPPT), AC/DC distribution/junction boxes, cables, earthing arrangement, Lightning protection, metering, other control equipment, etc.