## BHEL's Solar business gets on the fast track; Solar Photovoltaic (PV) Portfolio touches 370 MW mark

New Delhi, May 5: Bharat Heavy Electricals Limited (BHEL) has ended the year 2016-17 with a significant Solar PV portfolio of 370 MW, comprising 360 MW ground-mounted power plants and 10 MW rooftop power plants, marking a significant contribution to the Nation's Green Initiatives.

Of this, 170 MW of BHEL-supplied ground-mounted and 2290 KW of rooftop power plants are already under operation in various locations in the country. During the year, BHEL secured orders for 131 MW of ground-mounted and about 8 MW of rooftop Solar PV plants. In addition, BHEL secured its first order for 240 Solar PV based pumping stations.

Leveraging its technical capability to offer new solutions for enhancement of energy generation, BHEL is actively exploring deployment of single axis solar trackers and battery-based energy storage for Solar power plants. In addition, BHEL has prototyped floating Solar power plant and solar PV based charging stations for charging electric vehicles. Backed up by a strong project management team, BHEL has enhanced its EPC capacity to address large size PV plants.

BHEL is one of the very few organizations in the country that have expertise in the critical parts of the silicon value chain, viz., processing of silicon wafer to cell, processing of cell to PV module and in design, supply, installation, commissioning and O&M of ground-mounted and rooftop PV power plants and thus offers turnkey EPC solutions. Over the last few years BHEL has added several Balance of System (BOS) equipment like Power Control Unit (PCU), HT panels, SCADA system and power transformers to its offering for Solar PV plant.

The company has a dedicated R&D group in the area of semiconductor materials, nano-and thin film devices at their plants in Hyderabad and Gurgaon. There are a number of research initiatives aided by institute/laboratory collaborations with various IITs to facilitate innovations and engineering solutions in the area of materials in silicon solar cells. ISRO has also partnered with BHEL for fabrication of space-grade solar panels and satellite batteries (deployed in all its space programs).

BHEL has been contributing to the national initiatives for developing and promoting renewable energy based products on a sustained basis, for the past three decades. The company has enhanced its state-of-the-art manufacturing lines of solar cells to 105 MW and solar modules to 226 MW per annum. Keeping up with its green commitment, the company has also set up 11.5 MWp of solar power plants in its units at Ranipet, Trichy and Hyderabad.