INTERVIEW WITH Mr. HARTEK SINGH

EQ: Government of India target of 40GW Rooftop Solar by 2022.....Can the industry achieve this target.

HS: There is immense scope in the rooftop solar segment in the country, given the fact that out of the 40-GW target for 2022, not even 1 GW has been achieved so far. Moreover, installing rooftop projects on government and new residential buildings will become mandatory across the country in due course, which will create huge business opportunities. The fact that you don't need land for these projects is an added advantage. While rooftop solar is also becoming increasingly popular among industrialists and owners of commercial buildings, the progressively declining costs will prove to be a game-changer and take the rooftop solar industry to a new level, particularly in the residential category which holds the key. The gross and net metering options should be made financially more attractive. Considering that the repair and maintenance part is dissuading many people from opting for rooftop solar despite its immense potential, companies like Hartek Power are rightly focusing on repair and maintenance to create a competitive edge. Rooftop solar will largely drive the growth of the solar industry in years to come. The share of renewable energy, especially solar power, in the country's total power generation is gradually going up. Rooftop solar also provides renewed hope to remote areas which have not been connected to the grid so far.

- Measures taken by various governments to motivate residents to opt for rooftop solar, like easy approvals and the option of applying online, will also go a long way in achieving the 40-GW target by creating a positive outlook among people.

EQ: What are your USP's and differentiating factors as compared to your competitors

HS: Fast-track project execution within the specified deadline and uncompromising quality standards are the factors that distinguish us from our competitors. We also provide round-the-clock service in case of breakdown. We have adopted world-class technology and a fully backward integrated model. We have a strong relationship with suppliers, and have managed to retain much of our clientele over the past two decades.

EQ: Please present case study of few noteworthy projects executed by your company in the distributed solar space

HS: Known for its expertise in executing solar EPC projects, Hartek Power has installed substations for 258-MW solar projects since it entered the business three years ago. In the very first year of our solar EPC business (2013-14), we commissioned substations for 45-MW solar projects. In the following year (2014-15), we executed EPC orders for 90-MW solar projects, taking the figure to 135 MW, a threefold increase. We further consolidated our position in FY 2015-16 by providing grid connectivity to 123-MW solar projects spread across Punjab, Rajasthan, Andhra Pradesh, Bihar and Karnataka, thus enabling the company to register a nearly twofold increase as compared to the overall figure in the previous year. What has clinched these deals for us and helped us emerge as one of India's fastest growing EPC companies is our commitment to quality and timely execution of projects. Some of the key projects executed by us include 132-KV substation projects for a 40-MW solar plant in Rajasthan and a 50-MW solar project in Andhra Pradesh. Incidentally, Hartek Power had also constructed a 66-KV substation for the country's first ever commercial 2-MW solar plant in Amritsar. Awarded an EPC contract for a 50-MW solar project in Anantapur district of Andhra Pradesh last year, Hartek Power executed the project well before the stipulate deadline. The scope of work of the project, which happened to be Hartek Power's first one in the state and its biggest in South India, involved complete turnkey solutions and post-inverter works covering the design, engineering, installation and commissioning of the power plant electrification and automation systems as well as pooling stations. The solar power plant involved 24 group stations of 11 KV, which were connected with the main 132-KV switchyard. To meet the crucial deadlines, Hartek Power formed separate teams to work on these stations. A separate team was constituted to oversee the work on the 132-KV switchyard. These teams worked in close coordination to meet the deadline. We also deployed a quality manager at the site to make the company staff and contractors adhere to the quality and safety standards. As the Andhra Pradesh project was spread across 220 acres, a special team was formed to randomly check all quality parameters and safety guidelines. Meanwhile, our dedicated in-house team worked on the substation design, power plant engineering, complete automation and the entire SCADA (Supervisory Control And Data Acquisition) of the switchyard. Our strong supply chain and the practice of maintaining single supplier source for all projects also stood us in good stead with all the equipments used in the substation sourced from world-class companies. All our deliveries were complete two months before the actually charging. In fact, power transformer, which is considered a long lead item, reached the site three months prior to the charging of the plant. Having forayed into the rooftop solar segment only recently, Hartek Power has also installed more than 3-MW solar PV projects already, and is in the process of completing another 10 MW in Punjab. We recently executed our first rooftop project in Chandigarh, and plan to enter the residential segment with our solar solutions. Incidentally, the 436-kWp project spread over six buildings was Chandigarh's first rooftop project in the commercial category.

EQ: Please describe in detail about your company, its promoters, directors, investors, vision, objectives and its plans in the solar industry.

HS: Formed in 1991 as Amtek Energy & Power Pvt Ltd, a marketing company of industrial high-tension products, the Hartek Group is today one of India's fastest growing Engineering, Procurement and Construction (EPC) companies with business interests across the power sector value chain in power systems, rooftop solar, power distribution products, fuel services and value-added services. We specialise in executing high-voltage substation turnkey and rooftop solar projects and manufacturing a complete range of power distribution equipment/solutions catering to the needs of the industry as well as utilities. The Founder Chairman and Managing Director of the Hartek Group, Mr Hartek Singh, is a first-generation entrepreneur. We are aiming at connecting another 500 MW of solar power to the grid in the current financial year.

Our vision is to become a global leader in providing complete power distribution and sustainable power solutions to our customers. We have a mission of excelling in sustainable and smart grid power solutions. We have gained our creditworthiness by doing projects under leading consultants. Having opted for a self-financing business model, we are aiming to become a listed company in the next four-five years.

EQ: What are the opportunities in this space and the challenges in upscaling and mainstreaming distributed solar

HS: The residential category in the rooftop solar segment has the maximum potential in terms of sheer volumes. This potential can be gainfully exploited to its fullest once the residential category becomes more organised. Companies excelling in operation and maintenance will clearly have an edge over others. However, the lack of incentives in the commercial category poses a stiff challenge.

EQ: Kindly rank various states in the order of attractiveness of distributed solar market.

HS: Rajasthan has the maximum irradiation, followed by Gujarat and Madhya Pradesh. Punjab, Andhra Pradesh and Karnataka are also doing remarkably well in the solar segment by attracting huge investments.

EQ: Kindly enlighten on "Energy Storage as Game Changer"....Technology & Cost Trends, Incentives and Government Support needed

HS: A highly disruptive technology, energy storage can verily transform the power industry. Unlike Germany and other European countries, India is not really focusing on energy storage. Rooftop PV installations leave a lot to be desired. So, the focus should be on developing optimised technology simultaneously. Considering the high costs, the government should offer subsidies to promote the solar industry. It should also encourage localised manufacturing and indigenous technology.

EQ: Policies & Regulations: What are the benefits , subsidies given by SECI, Central, State and Local Government, What are the key policy & regulatory features announced by the government

HS: The government has been proactively promoting solar energy under the National Solar Mission, and these activities have really gained momentum over the past couple of years, as evident from the revised target for 2022 from 20 GW to 100 GW. The government can promote the rooftop segment by offering accelerated depreciation for industries and subsidies for the residential category.

EQ: Net Metering vs Gross Metering: Kindly explain what are the various metering techniques, their pros and cons

HS: Net metering is a billing mechanism that credits solar energy system owners for the electricity they add to the grid. For example, if a residential customer has a PV system on his rooftop, it may generate more electricity than the electricity used by the household during day hours. In case you choose to feed in all the electricity that your rooftop solar system generates, 10 units for instance, directly into the central grid without consuming any of it at your house, at the end of the day you will have a cumulative electricity consumption from the grid while feeding electricity into the grid at the same time. You will be billed for your cumulative consumption, and you will be paid for the gross amount of electricity you pumped into the grid. This payment mechanism is called gross metering. These are two entirely separate billing processes.