



BHADLA CASE STUDY

HEADWAY

In a recent development, the Central Electricity Regulatory Commission allowed a 5.4 GW solar power project by Bhadla solar park that opened a plethora of opportunity platforms for Indian producers. Accounting for one of the largest solar power parks in India, Bhadla solar park's attractive location in Rajasthan, has magnetized a breakthrough in bid pricing that India has ever witnessed. The strategic location of this solar park has invited multiple leaders in the solar power game to compete in the bidding and ignite the process of solar generation in the country. Amidst this highly competitive scenario, HFE embarked upon a moment of pride by winning a 300 MW production at a tariff of INR 2.46, thereby adding another feather to its solar cap!

LANDSCAPE

Bhadla is a sandy, dry and arid region enveloping an area of about 45 km square, located in the Jodhpur district of Rajasthan. The region that has often been described as "almost unliveable" bundles in abundance what Rajasthan is best known for – sand dunes, hot winds and sandstorms. HFE follows a meticulous process for selection and assessment of land and follows a rather elaborate due diligence process before exercising execution on the projects. The findings of this landscape were also a first for HFE yet, maintaining synchronization with its best practices, deriving a promising position in this particularly unique scenario was substantially made possible.

CHALLENGES & SOLUTIONS

Creating a major first level hindrance to the achievement of HFE's production targets have been the incessant 15 to 20 degrees high sand dunes in the area. Therefore, it is essential to mention the risk of establishing a plant in such a landscape ranging from yield sacrifices to a damaged and destroyed plant structure itself. Moreover, successful completion of production requires a multi-crore investment in flattening the dunes as a base step of the whole process. Planting module mounting structures in the likes of such landscape is an extremely difficult task. One that requires niche, thorough and creative engineering as well as operational skills. Good for HFE, for they overflow with intelligent, motivated personnel, always grabbing such challenges and overcoming them with utmost efficiency and effectiveness. In one such recent attempt, HFE furthered a step from its usual procedure and inculcated an innovative strategy of drone survey, mapping the complete land in conjunction with Global Mapper. This helped assessing the land and reprofiling it with simultaneous appropriations of costing requisites. Borrowing from the brains of its impeccable, in-house design team of over two dozen, highly qualified engineers, HFE was able to implement its design philosophies into the placement of MMS columns on the freshly revised slope analysis.

A general challenge in this project has been superimposing the usual performance standards maintained by HFE on a landscape that comes with unique characteristics and has not been vastly dived into. Given that solar power structure requires manual, water-based cleaning twice a month, HFE anticipates that as an inevitable challenge in this area.

The journey so far in this project has enabled HFE to enhance its performance portfolio and realize its own potential of overcoming new parameters of challenges and swift enactment on new, underutilized opportunities.

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