



RENEWABLES

- >> NTPC AND INDIAN ARMY LAUNCH
 INNOVATIVE SOLAR HYDROGEN
 MICROGRID PROJECT IN LADAKH
- > NTPC has signed a partnership agreement with the Indian Army to establish a solar hydrogen microgrid in Chushul, Ladakh, aimed at enhancing energy supply for military operations in remote locations.
- > The project highlights the integration of renewable energy and hydrogen technology, aligning with India's goal of promoting sustainable energy solutions in challenging environments.
- By utilizing solar power and hydrogen, the microgrid will provide a reliable, clean energy source, significantly improving energy security for the Indian Army.
- > The initiative underscores the importance of energy independence in remote areas, supporting both military logistics and the broader national interest in energy security.
- > This collaboration is part of a larger trend towards innovative energy solutions in defense, showcasing how military operations can benefit from advancements in renewable technologies.



RENEWABLES

- O NTPC AND INDIAN ARMY
 LAUNCH INNOVATIVE SOLAR
 HYDROGEN MICROGRID
 PROJECT IN LADAKH
- O UPEIDA PARTNERS WITH GEAPP FOR SUSTAINABLE SOLAR ENERGY INITIATIVE IN BUNDELKHAND EXPRESSWAY
- GUJARAT ISSUES BESS DRAFT TENDER FOR LONG DURATION 200MW/1600 MWH



Policy and Regulatory

- **⊘**AERC UNVEILS DRAFT
 REGULATIONS FOR DEVIATION
 SETTLEMENT TO ENHANCE GRID
 STABILITY













RENEWABLES

- > The project is expected to reduce carbon emissions, contributing to India's commitments under international climate agreements and promoting cleaner energy practices.
- > Successful implementation could serve as a model for similar projects in other regions, enhancing energy infrastructure while supporting military and civilian energy needs.

>> UPEIDA PARTNERS WITH GEAPP FOR SUSTAINABLE SOLAR ENERGY INITIATIVE IN BUNDELKHAND EXPRESSWAY

- > Uttar Pradesh Expressways Industrial Development Authority (UPEIDA) has partnered with the Global Energy Alliance for People and Planet (GEAPP) to develop a solar park along the Bundelkhand Expressway, marking a significant move towards renewable energy in Uttar Pradesh.
- > The solar park aims to harness solar energy efficiently, contributing to the state's sustainability goals and enhancing energy security while promoting clean power generation.
- > This collaboration is expected to stimulate local economic growth by creating job opportunities in the renewable energy sector, benefiting communities along the expressway.
- > The project aligns with India's broader commitment to increasing renewable energy capacity and reducing reliance on fossil fuels, supporting national climate objectives.



- > The solar park will not only provide clean energy but also support the infrastructure needed for energy distribution, reinforcing the region's energy network.
- > The Bundelkhand Expressway is a strategic location, and this project will utilize the land effectively, integrating solar energy generation with transportation infrastructure.
- > Successful implementation of this solar park could set a precedent for similar initiatives in other regions, showcasing the potential of publicprivate partnerships in renewable energy development

mercados

corporate@mercadosemi.in









RENEWABLES

>> GUJARAT ISSUES BESS DRAFT TENDER FOR LONG DURATION 200MW / 1600 MWH

- Sujarat Urja Vikas Nigam Ltd (GUVNL) has issued a draft tender for a 200 MW/1600 MWh standalone battery energy storage system (BESS) in Gujarat, with stakeholder feedback due by November 10, 2024.
- > The BESS will operate on a daily cycle, drawing power from GETCO and injecting it back based on instructions from the State Load Dispatch Centre, in coordination with GUVNL.
- > Bidders must submit a minimum bid of 400 MWh (equivalent to 50 MW for 8 hours), with projects located near substations within Gujarat's State Transmission Utility network.
- > Bidders must pay document fees, furnish an earnest money deposit, and meet a net worth requirement of 27.4 million INR per MW; AIF bidders must also meet a minimum Assets Under Management (AUM) requirement.
- > The tender does not specify a battery type, allowing developers to use any technology that meets the required standards, aiming to reduce technology risks and ensure timely project commissioning.













>> GERC Approves Competitive Tariffs for 832 MW Wind-Solar Projects

- Sujarat Electricity Regulatory Commission (GERC) has approved the tariff for Gujarat Urja Vikas Nigam Limited (GUVNL's) 832 MW power procurement from grid-connected wind-solar hybrid power projects (phase II).
- > The GERC has set tariffs ranging from ₹3.24 to ₹3.30 per kWh for 832 MW of power procurement from gridconnected wind-solar hybrid projects by GUVNL, encompassing both base and greenshoe capacities.
- > GUVNL initiated a tender on February 14, 2024, for 500 MW of capacity, receiving bids totaling 520 MW. An e-reverse auction was conducted to allocate 416 MW of this capacity.
- > Four bidders qualified for the auction, with KPI Green Energy offering the lowest bid at ₹3.30 per kWh. After negotiations, the tariff was reduced to ₹3.24 per kWh for base capacity.



- > There is an option for additional greenshoe capacity, with KPI Green Energy and JSW Neo Energy successfully negotiating for extra allocations at competitive rates
- Multiple rounds of tariff negotiations led to a competitive pricing outcome, reflecting the downward trend in solar module costs and enhanced competitiveness in the hybrid sector.
- The Commission emphasized a bucketfilling capacity allocation method, which considers bidders within a certain range above the lowest tariff, ensuring a fair selection process.
- > The GERC has made recent amendments to renewable energy connectivity regulations and released draft regulations to align state energy procurement with national sustainability goals.











POLICY AND REGULATORY

>> AERC UNVEILS DRAFT REGULATIONS FOR DEVIATION SETTLEMENT TO ENHANCE GRID STABILITY

- > Assam Electricity Regulatory **Commission Implements Draft** Deviation Settlement Mechanism (DSM) Regulations 2024. The new regulations will take effect on April 1, 2025, aiming to enhance grid reliability and integrate renewable energy sources more effectively within Assam.
- > These regulations will apply to all electricity transactions through open access, including those involving renewable energy generators and distribution licensees, ensuring a comprehensive framework for managing energy exchanges.
- > All regional entities must adhere to their schedules as defined by the Indian Electricity Grid Code (IEGC) until the new regulations come into force, emphasizing the importance of minimizing deviations for grid stability.
- > State entities are required to notify the State Load Despatch Center (SLDC) of energy exchange contracts, ensuring transparent communication about energy flows and compliance with operational protocols.

- > Entities must install interface meters that record energy flows every 15 minutes, synchronized with GPS to maintain accuracy in energy monitoring and ensure reliable operations across the transmission system.
- > The DSM sets specific charges for deviations, including zero charges for injecting infirm power under certain conditions and structured fees for drawing start-up power during outages, providing clarity on financial responsibilities.
- > Entities must pay deviation charges within ten days of the SLDC's statement, with penalties for delays. Compliance with tax requirements and support for SLDC's reporting obligations are also mandated.
- > The SLDC is tasked with drafting Operating Procedures and Business Rules within three months of notification, aimed at coordinating intra-state energy exchanges and ensuring adherence to the new regulations.









