

SPML Infra Ltd is among India's leading infrastructure EPC players with a long decades of experience in areas like water & wastewater management, and power T&D. In a strategic move, SPML Infra recently announced its foray in the battery energy storage system (BESS) segment, in partnership with a prominent US-based energy storage player. We have, in this exclusive interaction, Subhash Sethi, Chairman, SPML Infra Ltd, sharing keen insights on the company's BESS foray. Sethi explains how this forward-looking move closely aligns with India's clean energy goals. An interview by Venugopal Pillai.

### We are powering gridscale battery storage for a resilient energy future

What was the rationale behind SPML Infra entering the battery energy storage system (BESS) space?

SPML Infra's strategic foray into the Battery Energy Storage System (BESS) sector is a forward-looking move aligned with India's evolving energy landscape and growing demand for reliable, resilient, and sustainable power infrastructure. As the nation pursues its ambitious target of achieving 500 GW of non-fossil fuel capacity by 2030, BESS will play a key role in ensuring grid stability, optimizing renewable energy integration, and addressing fluctuations during peak demand and outages.

With decades-long expertise in power infrastructure development, SPML Infra is well-positioned to contribute meaningfully to India's clean energy transition. This strategic diversification enhances our portfolio in the energy storage domain reaffirming our commitment to innovation, sustainability, and integrated infrastructure solutions. Our initiative is aligned with the national priorities under 'Viksit Bharat,' supporting the vision for a greener, energy-secure future.

### Tell us about your exclusive agreement with US-based Energy Vault.

We have entered into an exclusive agreement with US-based Energy Vault, a global leader in sustainable energy storage solutions. This partnership marks a significant





milestone for us, as it allows us to bring cutting-edge energy storage technology to the Indian market and an alternative to reliance on Chinese OEM/Integrators.

Under this exclusive agreement, we have the rights to manufacture and deploy Energy Vault's proprietary B-Vault battery energy storage systems in India. These advanced, long-duration solutions are highly efficient, scalable, and cost-effective, customized as per client's needs and ideal for integrating renewable energy sources like solar and wind into the grid as well as for Grid stability. Its unique AC-coupled and DC-coupled configurations provide the drop-in flexibility needed for any energy storage project. We will also introduce the VaultOS energy management platform to enhance system optimization and grid reliability.

Our collaboration underscores a shared commitment to India's clean energy and net-zero ambitions by delivering advanced, reliable energy storage solutions. In partnership with Energy Vault, we aim to accelerate the energy transition, strengthen grid resilience, and significantly reduce dependence on fossil fuels. This initiative also supports the "Make in India" vision by fostering domestic manufacturing and technology integration within the energy storage ecosystem.

# What part of the BESS value chain will SPML Infra address? Most importantly, would SPML Infra manufacture the batteries locally?

SPML Infra intends to address the key infrastructure and system integration components of the Grid Scale Battery Energy Storage System (BESS) value chain with focus on the engineering, procurement, and construction (EPC) aspects, including site development, civil and electrical infrastructure, battery integration, and control systems. We aim to provide turnkey solutions that encompass the design, installation, commissioning, and long-term

operation and maintenance (O&M) of Grid Scale BESS projects, ensuring grid stability, renewable energy integration, and peak load management.

SPML Infra has the plan to manufacture battery packs locally with knowledge transfer from Energy Vault to ensure high-quality and technologically advanced battery modules are integrated into our systems. We will be a strategic integrator, bringing together best-in-class technologies, optimizing system performance, and ensuring cost-effective project execution within the Indian energy storage landscape.

## SPML Infra has been a longstanding player in the conventional power T&D space. How would you leverage this experience in the proposed BESS foray?

SPML Infra's strong background in power transmission and distribution gives us a solid base to enter the Grid Scale Battery Energy Storage Systems (BESS). Our experience with advanced substation, grid operations, load management, and infrastructure projects helps us design BESS solutions that work well with existing power systems.

We are well-versed in working with utilities & IPPs, following regulations, and delivering projects in varied conditions. With our in-house engineering and proven project management capabilities, we aim to deliver reliable, cost-effective, and scalable BESS solutions within reasonable time. This step supports our commitment to building a cleaner, more flexible, and future-ready energy system for India.

### How do you see the BESS market in India, especially in view of massive RE integration in the power grid?

The BESS market in India is rapidly advancing, fueled by ambitious renewable energy targets and the pressing need for grid stability. With a goal of 500 GW of renewable energy capacity by 2030, energy storage is becoming indispensable to Indian Energy need. Growth is further supported by rising storage demand and policies mandating a minimum of 10% BESS capacity in new renewable projects.

Declining battery cell costs and domestic manufacturing initiatives under the PLI scheme are providing strong momentum. Government incentives like viability gap funding and RE-plus-storage tenders are also fast-tracking adoption. India's energy storage demand is expected to surge significantly, from 236 GWh by 2031



to an estimated 1840 GWh by 2047. Overall, BESS is emerging as a vital enabler for large-scale renewable integration and a resilient, low-carbon energy future.

#### What challenges do you foresee in deployment of gridscale BESS in India – both on the execution side and O&M?

Despite significant strides in energy generation, critical challenges on both execution and O&M of energy storage remain. High capital costs, evolving regulatory frameworks, rapidly changing cell technology and the lack of viable business models and non-extension of VGF Schemes to Private Utilities and IPPs hinder widespread adoption. Grid integration issues, land acquisition, and the need for infrastructure upgrades further add complications.

On the operations and maintenance side, India faces a shortage of skilled manpower trained in battery system management, predictive maintenance, and cyber security. Ensuring long-term performance, safety, and availability of BESS assets will require robust digital tools, localized



technical expertise, and a strong ecosystem of OEM support and service partners.

## We understand that MIDC has allotted land to SPML Infra for a BESS unit. How does this support India's clean energy vision?

Yes, Maharashtra Industrial Development Corporation (MIDC) has allotted 99,000 square meters of land in the Supa Parner Industrial Park, Ahmednagar, Maharashtra, to SPML Infra Ltd for the establishment of a state-of-the-art Battery Energy Storage System (BESS) manufacturing unit. This strategic land allocation marks a significant milestone in SPML Infra's expansion into the fast-evolving energy storage sector.

SPML Infra's entry into BESS is timely and aligned with India's ambitious renewable energy goals and the rising demand for advanced energy storage solutions. Battery-based systems are critical for enabling renewable energy integration, ensuring grid stability, and supporting energy security. The upcoming manufacturing facility will not only enhance SPML Infra's capabilities in clean energy infrastructure but also contribute to India's goal of becoming a global hub for green technologies. The energy storage market in India is projected to grow exponentially, reaching a value of \$25 billion by 2030, and SPML is poised to play a key role in this transformation through innovation, technology, scale, and sustainable manufacturing.

#### How do you see the road ahead for SPML's BESS foray and what tangible milestones would you like to see the company crossing in the next say 3-5 years?

SPML's entry into the Battery Energy Storage Systems (BESS) is a forward-looking move that aligns with India's clean energy goals. As the use of renewable energy grows, BESS will play an important role in managing power fluctuations, improving reliability, and handling peak electricity demand. With its vast experience in power infrastructure, SPML Infra is well-placed to build a strong presence in this growing sector.

In the next 3–5 years, key milestones would include the successful execution of a few projects, strengthening strategic technology partnerships, and taking part in large-scale government and private sector tenders. Building a solid project pipeline, developing in-house skills for energy management, and generating noticeable revenue from the BESS business will be important to establishing SPML as a key player in the energy storage space.