LFP BESS for Coastal Sites: Salt-Spray Benefits & Drawbacks

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LFP BESS in the Salt Air: An Engineer's Honest Take on Coastal Deployments

Honestly, if I had a dollar for every time a client called me about a battery storage project near the coast, I'd probably have retired by now. There's a huge push, especially in places like California, Florida, the UK North Sea coast, and the Mediterranean, to pair renewables with storage right where the energy is needed. But that salty, humid air? It's a silent killer for electronics. I've seen control boards corrode in months and enclosures pit faster than you'd believe. Let's have a real talk, over a virtual coffee, about using LFP (LiFePO4) Battery Energy Storage Systems in these tough coastal salt-spray environments. What works, what doesn't, and what you really need to think about beyond the spec sheet.

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The Problem: Why Salt Air is Your BESS's Worst Nightmare

You're not just dealing with a little moisture. Salt spray is an aggressive, conductive, and corrosive cocktail. It accelerates galvanic corrosion between dissimilar metals in your battery racking and busbars. It creeps into connectors, increasing resistance and creating hot spots. For any BESS, this means a direct attack on three fronts: safety (corrosion-induced faults), performance

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