



Increasing grid flexibility through integrating AI into BESS operations.

A physics-informed AI platform that unlocks the full potential of battery energy storage, delivering optimized real-time charging, dispatch, and market participation — while safeguarding asset health and ensuring reliable, scalable flexibility for the grid.

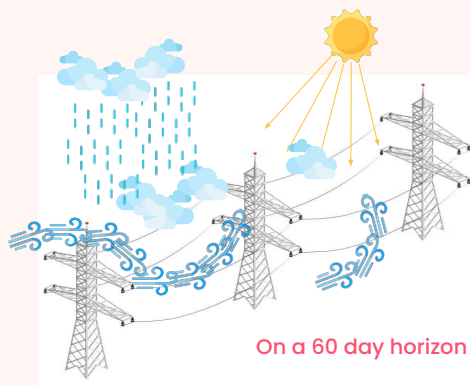
The Problem

Battery owners face volatile spreads,
weather uncertainty, and inefficient
dispatch.

*An BESS asset owner loses \$100k–\$400k per MW annually – in potential revenue
The asset owner spends \$1-1.5 Million to setup 1MW of storage.
Asset owners currently make \$50k annually on 1MW of storage.*

The Solution

Nexys predicts weather impacts on renewable generation and grid conditions to unlock alpha for BESS assets.



Nexys forecasts how weather-driven factors—like temperature, wind, and solar loading—affect renewable generation and load spikes. By predicting these impacts, we identify arbitrage opportunities to maximize revenue on BESS assets

Traction so far

- **Portfolio:** 20mw worth of BESS assets have been committed to us in America and another 10mw worth of BESS assets have been committed to us in Germany - through LOIs and MOUs.
- **Revenue unlocked:** \$13,000 on 1mw in the last 27 days*. (paper trading on the ERCOT grid)
- **Robust & operational:** Forward holdouts show only **3–4% accuracy drop**, ablation confirms physics-consistency, and end-to-end latency <90 sec for SCADA integration.
- **Accuracy & safety:** Day-ahead price error MAE $\pm 5\text{--}8\%$, real-time dispatch forecasts within $\pm 3\%$ of realized spreads. Dispatch safety: 0 operational constraint violations (SoC, ramping, or thermal limits).



\$15 Billion

Obtainable Market

The Arbitrage opp is typically 5-15% of the serviceable market - addressable by flexible assets - BESS

\$100 Billion

Serviceable Market

Energy Arbitrage (Day-Ahead + Real-Time market - most of our revenue will be generated here - because of the spread between the two markets)

\$400 Billion

Addressable Market

per year in wholesale electricity (our operating market)

The Team



Amann Shariff
Co-founder & CEO

We're a next gen blend of product, tech and growth.

Combining experience from State Street, EF, and The Residency with technical expertise from Texas Instruments, IISC, and Lossfunk



Hariharan Ayappane
Co-founder & CTO





Let's revolutionize the way BESS operates.

Reach out to us at amann@nexysresearch.com