

PATENTED CONTROL ARCHITECTURE

Cell-Specific Predictive Control

Innovating safety, performance, and longevity in battery technology

INVESTOR BRIEFING

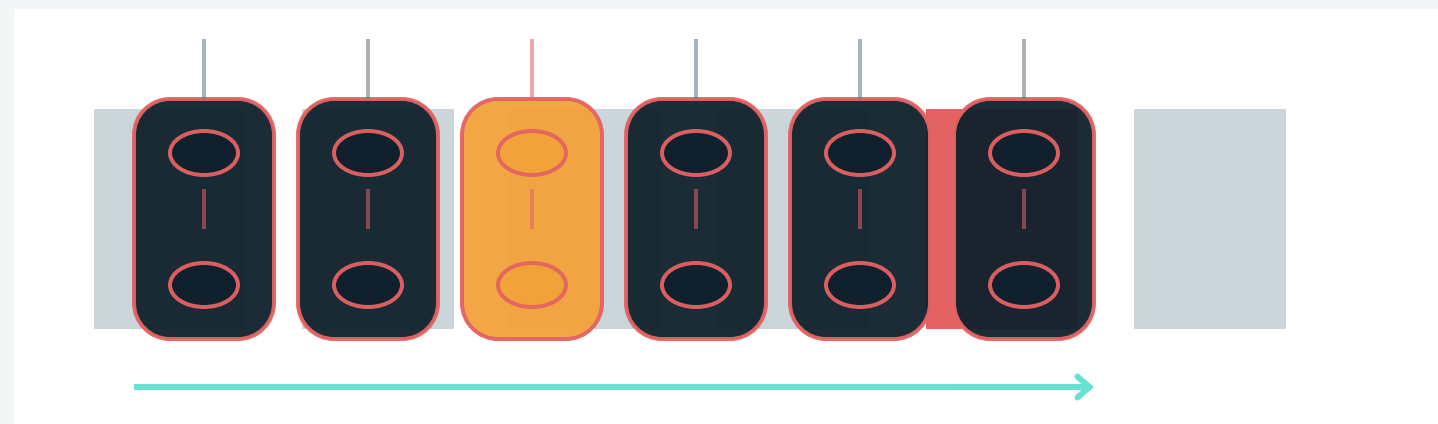
European Business Group - Dr. Wiegand Helmut FLEISCHER



One weak cell constrains the entire pack.

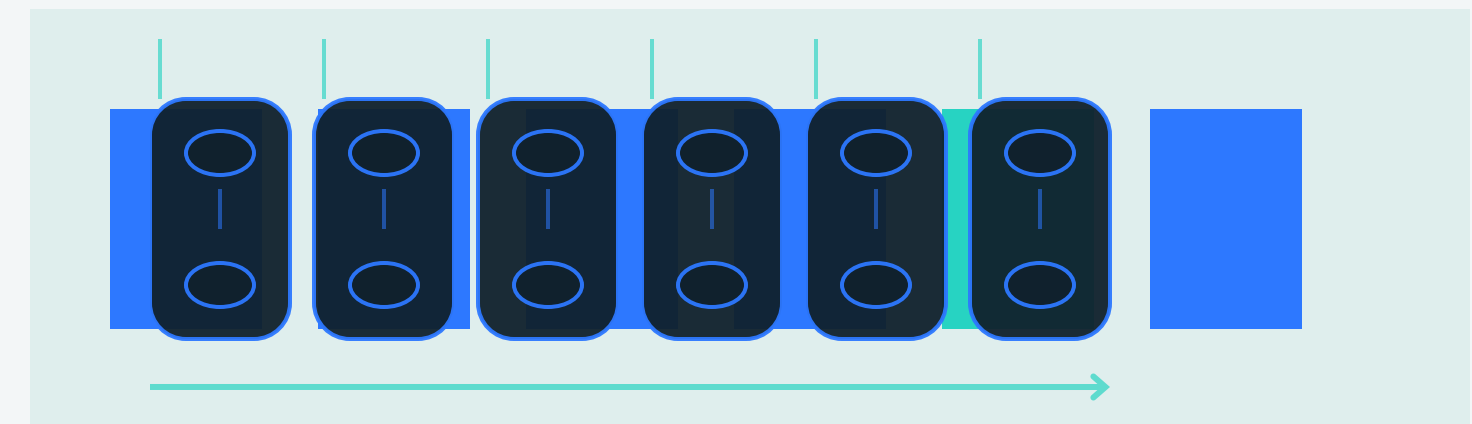
Current BMS approaches limit usable power and reduce battery lifespan through conservative pack-wide reactions.

REACTIVE TODAY



Single limit breach

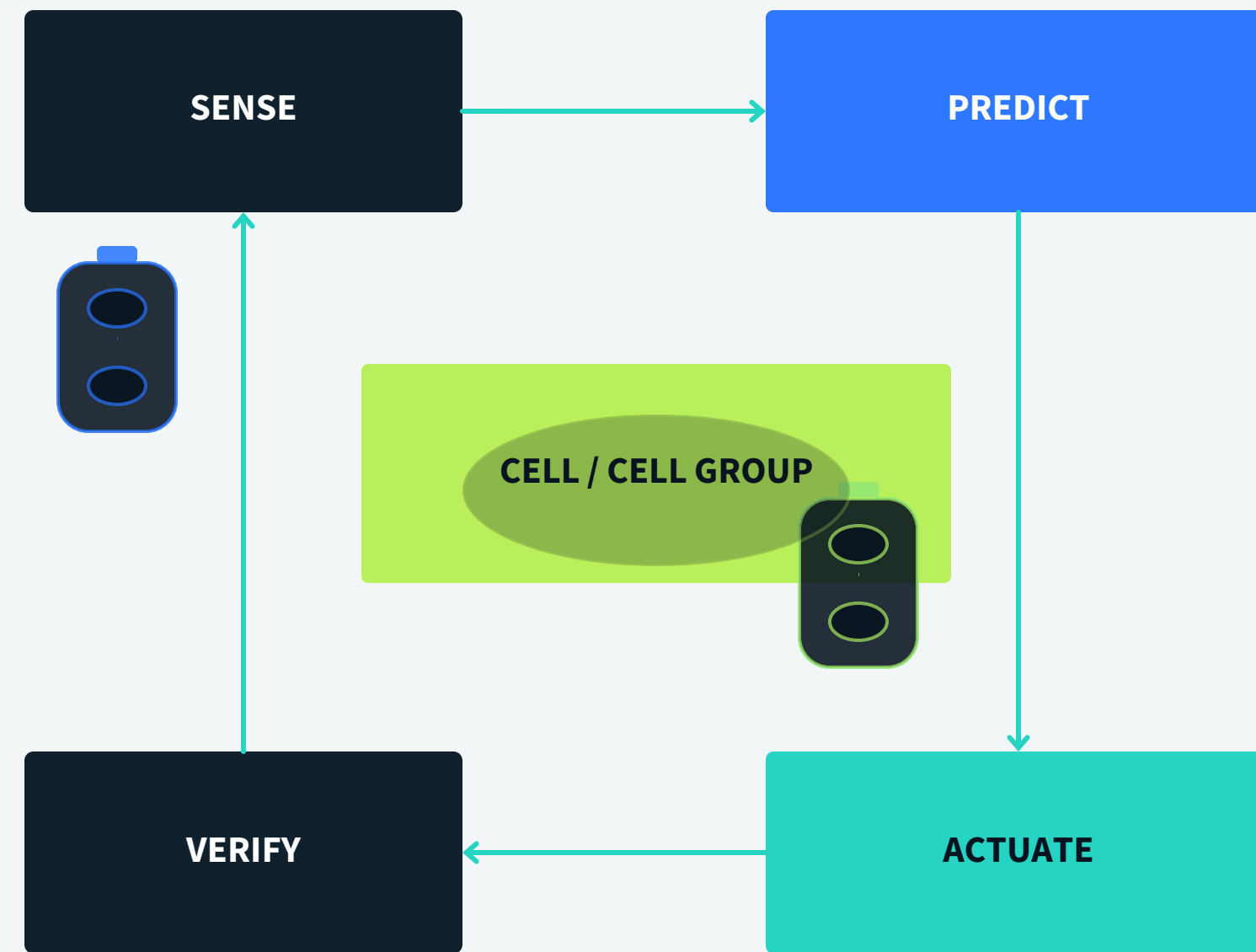
PREDICTIVE TARGET



Selective cell relief

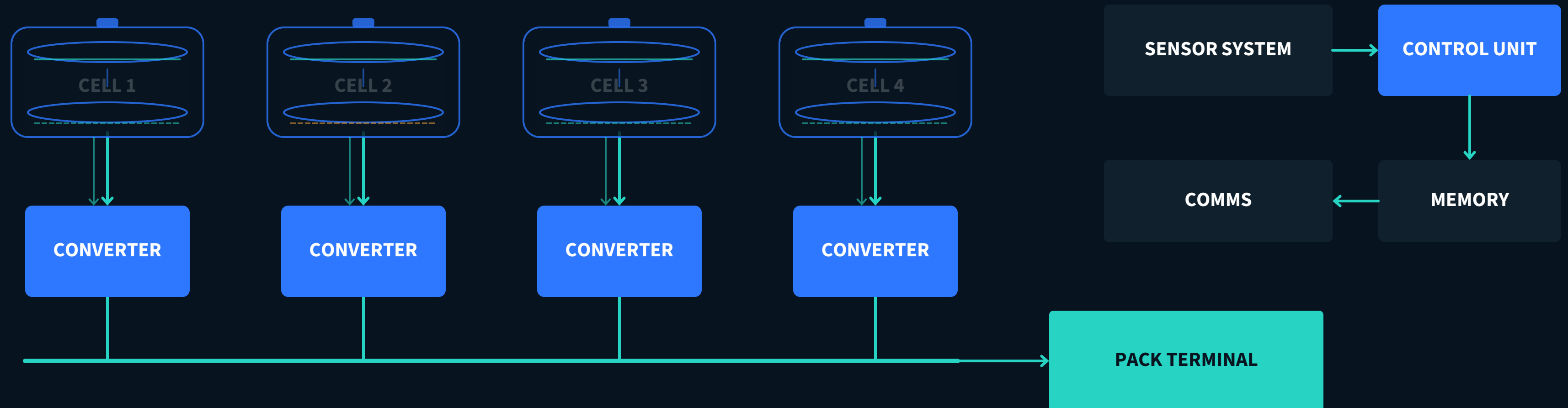
Predict. Act. Verify. At cell level.

A closed-loop architecture forecasts cell capability, allocates power and thermal intervention selectively, then verifies the response—continuously inside defined safety limits.



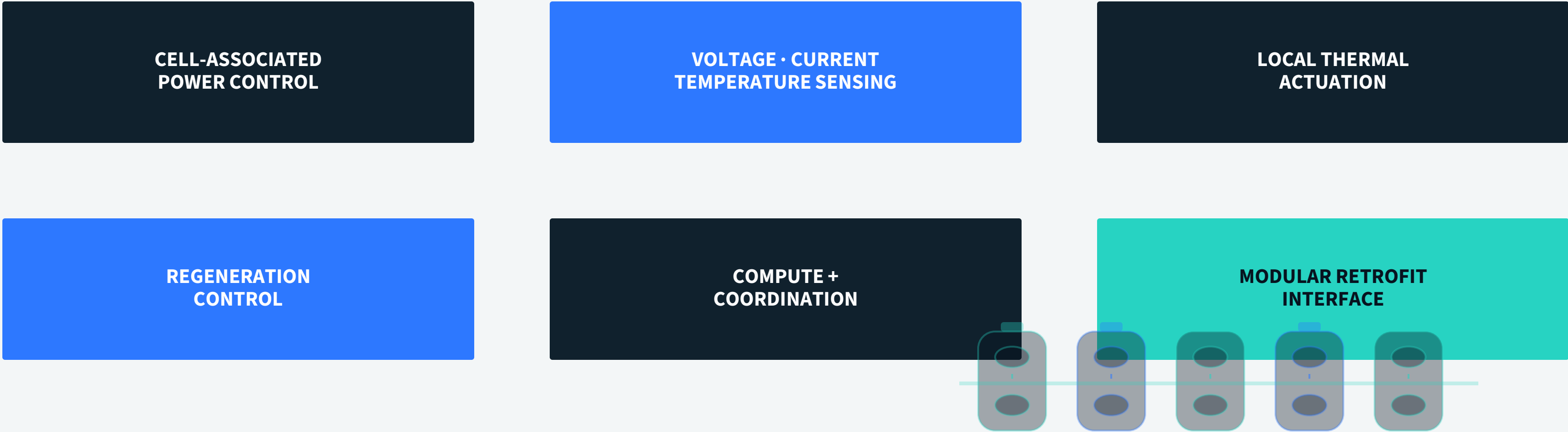
Cell-individual power paths. One coordinated controller.

Sensors close the loop through the control unit, memory and communications layer; each energy conversion device can relieve its associated cell without forcing pack-wide derating.

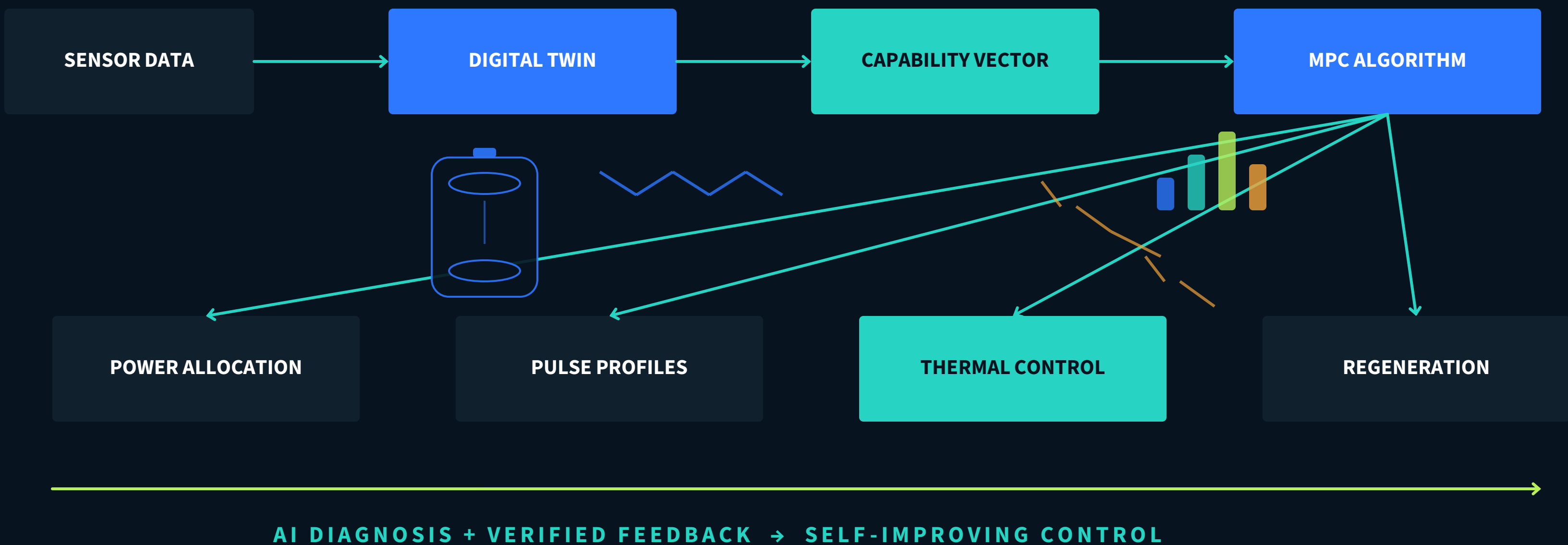


Multi-modal intervention, modular by design.

A retrofit-compatible stack coordinates electrical, thermal and regenerative control without replacing the full battery system.

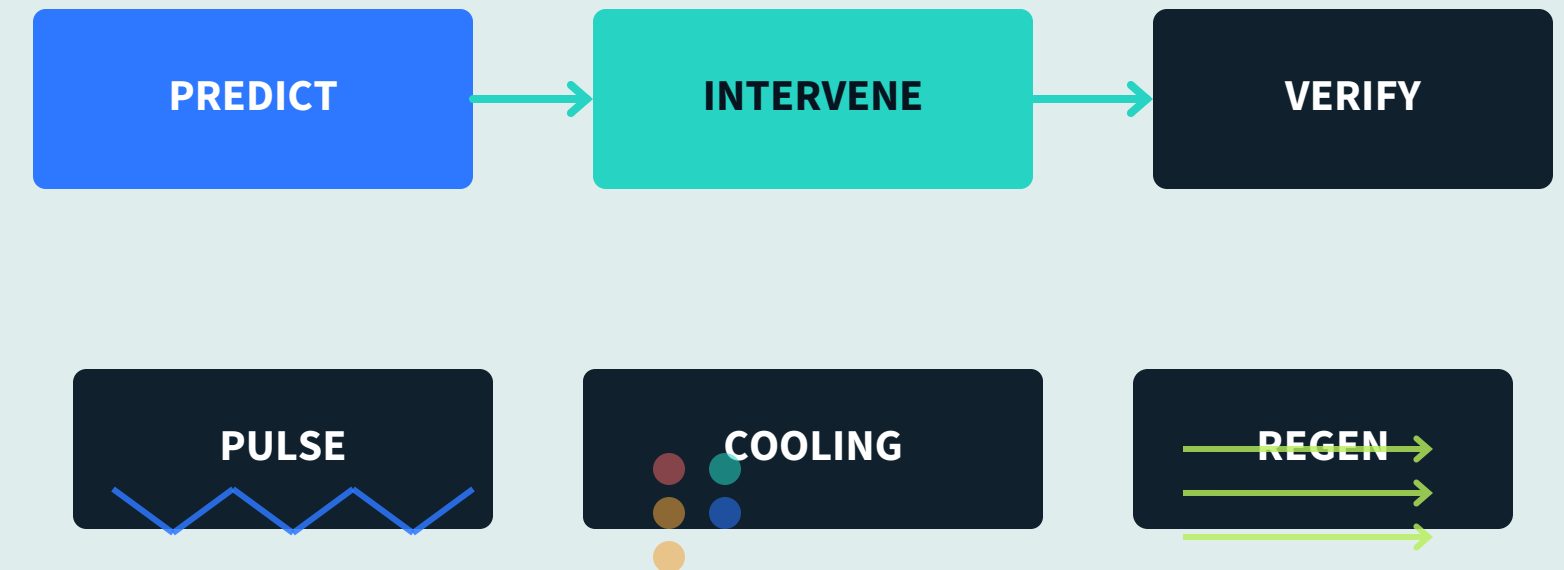


Prediction becomes the control variable.



Act together. Verify every response.

Synchronized pulse shaping, local cooling and state-dependent regeneration relieve only the constrained cell—then post-intervention sensing confirms the outcome.



More capability— without relaxing safety.

The moat is the closed system: early detection, selective multi-modal actuation and verified feedback operating as one safety-limited architecture.



EARLIER INTERVENTION

before critical thresholds



USABLE POWER

and fast-charge headroom



HOT SPOTS

and ageing spread



SERVICE LIFE

with less pack derating

One architecture. Many battery markets.

Modular deployment spans new platforms, legacy packs and second-life systems.



EV + HYBRID



INDUSTRIAL + TOOLS



GRID STORAGE



SECOND-LIFE + RETROFIT



AVIATION + eVTOL



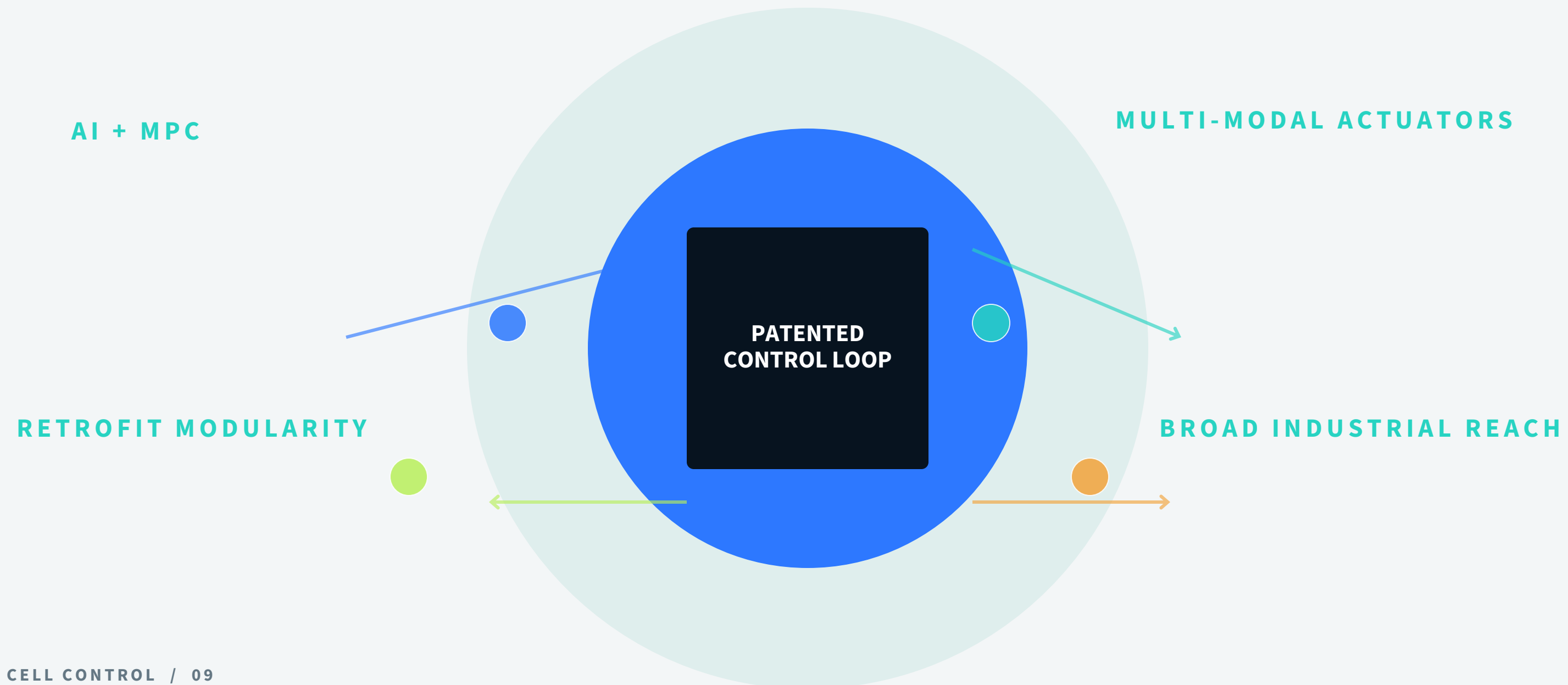
TEST + DEVELOPMENT



MARINE

Defensible at the system level. Scalable at the market level.

Patent claims protect the coupling—not a single component—creating a credible path from pilot integration to repeatable deployment.



Control each cell. Unlock the pack.

Safer operation. Higher usable performance. Longer service life. Retrofit-ready deployment.

LET'S DEFINE THE PILOT.



QUESTIONS + NEXT STEPS

Continue the conversation.

Investment, partnership and integration discussions are welcome.

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