

SPEED TO POWER — THE BRIDGE-TO-GRID PLAYBOOK

Emerging Solutions for Grid Efficiency · Andre Canelhas · IREF, Paris, 25 August 2026

Energise the campus first from its own bridging resources, then integrate with the grid progressively. Where a viable bridging supply, consents and a compliant minimal connection can be secured.

1 SITE FOR DELIVERABILITY

Choose the location for how fast firm power can be delivered — generation at the load, or the load at the power production area.

2 BUILD MODULAR

Standardised blocks from tens of MW to multi-GW; energise each block as it is built.

3 BRIDGE POWER FIRST

On-site generation, storage and grid-forming capability initially behind a minimal or no grid tie.

4 OPERATE AS A VPP, DAY ONE

Run the campus as a dispatchable, transparent virtual power plant — flexibility adds value the faster, non-firm connection.

5 OVERLAY & REINFORCE

Add the VSC-HVDC and FACTS overlay and rebuild the surrounding AC network, using the load as an anchor.

6 FIRM PROGRESSIVELY

Convert non-firm access to firm as upgrades complete — resilience deepens without stalling the build.

Commercial & risk principle: each party underwrites what it is best placed to carry — private firming by the developer, milestone-based co-development, standardised contracts, productised hardware. Nothing socialised onto ordinary consumers.

CALL TO ACTION

Utilities & system operators — from rationing to enabling readiness-based, performance-based standards; non-firm and flexible access.

Hyperscalers — bring your own firming; operate as transparent, dispatchable, grid-supporting assets.

Manufacturers — productise and standardise adaptable, grid-forming, rapidly deployable equipment.

Policymakers & regulators — write the shared-risk framework; shield ordinary consumers from socialised costs.

All parties — open standards and shared, high-fidelity models, tested in the loop before energisation.

Candidate pathway, study-gated: schedule and applicability are site-specific. Open and multi-vendor — nothing proprietary to any single supplier. Full argument and references: Emerging Solutions for Grid Efficiency, PR-CH-2608-0001 R1, August 2026.