

# Data Center Briefing

December 17, 2025

Global

## Key themes:

Planning/permitting reform to accelerate data centres (UK; select U.S. states); Interconnection bottlenecks driving storage-as-bridge solutions (Aligned/Calibrant); Coal/industrial site recycling for data centre campuses (RWE/Didcot A); Long-tenor clean power contracting for hyperscaler loads (Malaysia, India); Rising scrutiny of diesel backup generator operation and emissions (Virginia); AI hardware/network capex cycle remains strong (Dell'Oro; Nvidia); Grid investment and transmission upgrades enabling renewables integration (Egypt EBRD package)

## Market overview (Global | 17 Dec 2025)

AI-driven load growth continues to pull capital and policy toward **power availability, faster interconnection, and higher-density cooling**. The day's newsflow reinforces three parallel themes: (1) **developers and hyperscalers are locking in clean energy** via long-tenor PPAs and onsite/adjacent energy solutions; (2) **planning and permitting reform** is moving up the agenda (notably the UK and select U.S. states); and (3) supply-chain and operating stack investments (components, scheduling software, liquid cooling tooling) are accelerating to support GPU-heavy deployments.

## Risks and watchpoints

### Near-term downside risks / bottlenecks

- **Grid access and interconnection timing risk:** Multiple items underscore that grid capacity and process timelines—not capital—are gating data centre delivery (e.g., [Energy race underpins AI revolution: grid bottlenecks need fixing](#) and DC Byte's constraint framing in [Hyperscale data centre growth constrained by power and land](#)).

- **Local permitting and community backlash:** Projects face conditional use votes, litigation, and “social license” friction (noise, water, diesel emissions, rates), raising schedule and scope-risk (e.g., [Springdale debates data center at former coal plant site](#); [Environmental group’s lawsuit seeks halt to Pine Island data center](#); [Resident seeks to overturn Saline Township data center settlement](#)).
- **Environmental compliance and generator operating rules:** Virginia’s proposed definition expansion around “emergency” generator operation could heighten regulatory and reputational risk while also improving operational resilience for operators (see [Virginia DEQ guidance may expand data centers’ diesel generator use](#)).
- **Cost pass-through / rate pressure:** Virginia commentary links rising rates to fuel volatility and grid capex “partly driven by data center demand,” increasing scrutiny on cost allocation (see [Analysis links Virginia electricity rate hikes to fossil fuels](#)).

### Near-term upside risks / catalysts

- **Planning/permitting acceleration:** UK consultation proposes a **single planning route** to accelerate data centres near energy sites and AI Growth Zones (see [UK launches consultation to overhaul National Planning Policy](#)).
- **Interconnection “bridge” solutions:** Storage deployed to advance grid connection timelines is becoming investable and repeatable (see [Calibrant to deliver 31MW/62MWh BESS for Aligned data centre](#)).
- **Long-tenor clean energy contracting:** New PPAs support bankability for renewables tied to hyperscaler load growth (see [Google and TotalEnergies ink 1 TWh Malaysia PPA](#); [ReNew and Google sign 150 MW Rajasthan solar deal](#)).

## Key deals and projects

### Data centres / sites / corporate actions

- **Michigan (Southfield):** City Council approved Metrobloks’ site plan for a **109,683-sq-ft data center on 12.19 acres** requiring **100 MW**. Developer estimates **~\$1.5bn capex in two phases**, with partial funding for land + utility upgrades and full capitalization targeted after tenant confirmation (see [Southfield approves 100MW Metrobloks data center site plan](#)).
- **Pennsylvania (Springdale; former Cheswick Generating Station):** Allegheny DC Property Company proposes a **565,000-sq-ft data center**; borough council vote on a conditional use permit was slated for **Dec. 16**. Local concerns flagged: noise, water, backup generators, and rate impacts; power draw characterized as comparable to **>140,000 homes** (see [Springdale debates data center at former coal plant site](#)).
- **UK (coal-to-digital redevelopment):** RWE disclosed sale of former coal plant **Didcot A to Amazon** and noted **€225m proceeds** from selling an idle UK site to a hyperscaler; Deutsche Bank estimates **ten ~200 MW**

**deals** could represent a **€1.6bn** opportunity, with **€900m** of deals possible by 2030 (see [RWE sold UK coal plant to Amazon, eyes data-center deals](#)).

- **Engineering / consulting capacity:** WSP agreed to acquire TRC Companies in a **\$3.3bn all-cash** deal (close expected **Q1 2026**), expanding power/water/infrastructure/environmental services capacity—relevant for permitting, interconnection studies, and delivery support (see [WSP to acquire TRC Companies in \\$3.3bn all-cash deal](#)).

## Technology and operations stack (AI/HPC enablement)

- **AI/HPC ops + liquid cooling intelligence:** Salute and MCIM partnered to integrate MCIM’s operational intelligence platform with Salute’s direct-to-chip liquid cooling operations service, targeting scalable delivery in high-density AI facilities (see [Salute and MCIM partner on AI/HPC data center operations](#)).
- **Workload management control point:** Nvidia acquired SchedMD (Slurm developer), signaling a push to shape AI workload scheduling across GPU/network telemetry while stating Slurm remains open-source/vendor-neutral (see [Nvidia acquires Slurm developer SchedMD to influence AI scheduling](#)).
- **Components demand indicator:** Dell’Oro reported **Q3 component sales +40% YoY** driven by AI; **Ethernet switch revenue hit \$8bn**, with Nvidia at **\$1bn** (11.6% share). Dell’Oro projects **26% CAGR** over five years to **>\$760bn** for server/storage system components (see [Dell’Oro: AI drives record Ethernet switch and component sales](#)).

## Power, grid and interconnection highlights

- **Oregon (Hillsboro):** Calibrant will deploy a **31MW/62MWh BESS** at Aligned Data Centers’ campus to **accelerate interconnection** and enable a planned **100MW data centre** to connect sooner; PGE benefit framed as serving a “more flexible form of load” (see [Calibrant to deliver 31MW/62MWh BESS for Aligned data centre](#)).
- **California (hydrogen baseload concept):** Vema Hydrogen signed a **10-year hydrogen purchase and sale agreement** with Verne to supply Engineered Mineral Hydrogen to Verne’s data center customers; operations could begin **in 2028**, with Vema scaling to **>36,000 metric tons/year** (see [Vema and Verne sign hydrogen deal for California data centers](#)).
- **India (clean power for hyperscaler loads):**
  - ReNew signed a **long-term agreement with Google** for a **150MW solar project in Rajasthan** (commissioning **2026**) adding **~425,000 MWh/year**; ReNew’s C&I portfolio cited at **2.7GW** (see [ReNew and Google sign 150 MW Rajasthan solar deal](#)).
  - India’s MNRE asked state transmission utilities to publish **spare substation transmission capacity**, following Rajasthan’s approach—potentially improving transparency for siting and interconnection planning (see [MNRE urges states to publish spare transmission capacity](#)).

- **Malaysia (renewables for Google):** Google and TotalEnergies signed a long-term PPA for **1 TWh** of certified renewable energy from the **Citra Energies solar plant in Kedah** (see [Google and TotalEnergies ink 1 TWh Malaysia PPA](#)). A separate report specifies **21-year tenor, 20MW** project size, construction starting **early 2026**, and expected **financial close Q1 2026**, with TotalEnergies **49%** / MK Land **51%** ownership (see [TotalEnergies and Google sign 21-year renewable PPA in Malaysia](#)).
- **Egypt (transmission buildout):** EBRD financing package of **€200m** (€165m loan + €35m EU grant) to EETC to upgrade transmission, starting with a **500kV Cairo substation** and a HV line to evacuate **>2.1GW** from the Gulf of Suez; aligned to a **22GW renewables target by 2030** (see [EBRD backs €200 million Egypt grid upgrade for renewables](#)).
- **System-level constraint framing (U.S.):** KPMG commentary highlights AI-driven demand creating a “critical U.S. grid bottleneck,” citing DOE direction to FERC and FERC’s ANOPR to improve transmission access for large loads (see [Energy race underpins AI revolution: grid bottlenecks need fixing](#)).

## Policy and regulatory developments

### UK / EU

- **UK planning reform (consultation):** Government consultation proposes significant reforms to speed delivery of housing and clean energy and includes a new **single planning route** to accelerate **data centres near energy sites and AI Growth Zones** (see [UK launches consultation to overhaul National Planning Policy](#)).
- **Netherlands recovery plan (EU Implementing Decision annex):** EU amended the Netherlands’ Recovery and Resilience Plan with reforms/investments across green transition and digitalisation, including a **REPowerEU energy chapter**; plan cost cited at **€5.44bn** with **€1.42bn** for REPowerEU and staged EU funding instalments (see [EU amends Dutch recovery plan to boost green, digital transition](#)).
- **ReArm Europe funding rules:** EU amends multiple funding regulations to channel more investment into dual-use/defence technologies and infrastructure, including opening Digital Europe and EIC pathways to defence-related **AI and cloud infrastructure** and supporting dual-use transport corridors (see [EU regulation to boost defence-related investment via ReArm Europe](#)).

### United States (state-level permitting + environmental)

- **Louisiana PSC (hyperscaler approvals):** Competing proposals aim to speed approvals for large power customers (e.g., Meta). One approach requires a **10-year service agreement**, LED confirmation letter, and fixed revenue covering **≥50% of capacity costs** to reach a PSC vote within **seven months**; staff asked to develop a broader regulatory model for grid

connection/capacity procurement/cost-sharing (see [Louisiana PSC debates faster approval for hyperscaler power](#)).

- **Ohio EPA (wastewater permitting):** Draft general NPDES permit would streamline wastewater/stormwater permitting for data centers via a notice-of-intent process; impacts **200+ data centers**; public comment through **Dec. 17** with a **Dec. 17** hearing (see [Ohio EPA proposes streamlined wastewater permits for data centers](#)).
- **Virginia DEQ (generator guidance):** Sept. 30 memo proposes expanding the definition of emergency to allow data centers to run Tier II diesel backup generators during certain planned utility outages (notice within 14 days). Guidance cited as affecting **~9,000 generators** in Virginia and intersects with emissions concerns and rapid capacity growth (see [Virginia DEQ guidance may expand data centers' diesel generator use](#)).
- **Federal reliability policy signal:** The U.S. House passed H.R. 3632 (Power Plant Reliability Act) aimed at keeping baseload plants online and reducing blackout risk (see [US House passes Power Plant Reliability Act for energy](#)).

## What to watch (next 2-8 weeks)

- Whether the UK's proposed **single planning route** materially de-risks timelines for data centres near energy sites and AI Growth Zones ([UK launches consultation to overhaul National Planning Policy](#)).
- Louisiana PSC outcomes on **hyperscaler approval acceleration** and the evolving template for cost-sharing/capacity procurement ([Louisiana PSC debates faster approval for hyperscaler power](#)).
- Virginia's generator guidance trajectory and whether it becomes a broader template (or triggers pushback) given the scale of installed backup fleets ([Virginia DEQ guidance may expand data centers' diesel generator use](#)).
- Continued replication of **BESS-as-interconnection-bridge** structures following Aligned/Calibrant in Hillsboro ([Calibrant to deliver 31MW/62MWh BESS for Aligned data centre](#)).
- UK/EU site recycling momentum (coal/industrial to data centre) after RWE's disclosed UK asset sales to hyperscalers ([RWE sold UK coal plant to Amazon, eyes data-center deals](#)).
- Bankability of long-tenor PPAs for hyperscaler load growth in newer markets (Malaysia, India) and timelines to financial close/commissioning ([TotalEnergies and Google sign 21-year renewable PPA in Malaysia](#); [ReNew and Google sign 150 MW Rajasthan solar deal](#)).