US Data Center Daily Briefing

December 16, 2025

KEY THEMES

- Ireland reopens Dublin data-centre connections with strict on-site flexibility and renewables requirements
- EU advances European Grids Package to accelerate planning, permitting, and cost-sharing
- Clean firm power resurfaces via Three Mile Island reboot and Microsoft long-term PPA
- Cross-border power and storage buildout: Vena–CATL 4,000 MWh for Indonesia–Singapore export project
- Subsea cable security focus on faster repairs and pragmatic resilience measures
- Permitting tailwinds in the US from NEPA reforms, offset by rising local/state opposition signals
- Major European capacity and capex plans: Data4 €21bn by 2030, including 180 MW Hanau campus

Market overview (Global | 16 Dec 2025)

AI-driven capacity growth continues to collide with two hard constraints: grid access/permitting and energy credibility (renewables, on-site flexibility, and clean firm supply). Several policy signals today point to more centralised/accelerated grid buildout in Europe and streamlined permitting in the US, while individual markets tighten operating and connection conditions (notably Ireland/Dublin). Parallel infrastructure—subsea cables, cable landing stations, and cross-border interconnectors—remains a strategic resilience theme as data centre density rises.

Risks and watchpoints

Downside risks (near-term):

- **Connection conditionality raises delivery risk**: Ireland's new Dublin connection regime requires **on-site generation or batteries to meet full demand** plus ability to **export to grid**, and **80% annual demand from new renewables**—potentially increasing capex, development lead times, and contracting complexity (Ireland lifts de facto ban on Dublin data-center connections).
- **Social licence and local permitting backlash**: A push for a **statewide moratorium on new AI data centres** in Michigan underscores growing community scrutiny of land/water use and "secret deals" (Michigan residents rally for statewide moratorium on AI data centers). Similar local-government negotiation dynamics are visible in Virginia (e.g., proposed performance agreements) (Central Virginia local governments plan budgets, transit, data centers).

- **Air permitting/operational compliance risk**: Virginia DEQ guidance broadening what qualifies as an "emergency" to allow Tier II diesel generators during some planned outages may reduce uptime risk but increases environmental challenge/PR exposure and potential future regulatory tightening (Virginia regulators weigh expanded diesel generator use for data centers).
- **Physical infrastructure resilience**: Industry bodies warn that **bureaucracy and repair delays** are key resilience risks for subsea cable systems; any over-prescriptive security regime could slow response times and increase outage exposure for connectivity-dependent campuses (ESCA urges EU to support market-led subsea cable security).

Upside risks (near-term opportunities):

- **Permitting acceleration tailwinds**: US NEPA reforms and guidance set statutory/administrative timelines (e.g., **180 days for EAs; one year for EISs**) and mechanisms for expedited review—supportive for generation/transmission and data centre interconnection pipelines (NEPA reforms streamline permitting for energy and data centers).
- **EU grid reform momentum**: The European Commission's preferred option for a European Grids Package emphasises reinforced EU-level planning, cost-sharing, faster permitting and security—potentially easing one of the binding constraints for hyperscale/AI clusters over the medium term (EU impact assessment for European Grids Package and preferred option; EU impact assessment for European Grids Package and permitting reform).
- **Clean firm power pathways widen**: India's proposed unified nuclear energy law explicitly supports nuclear expansion (targeting **100 GW by 2047**) as part of decarbonisation and round-the-clock clean power ambitions relevant to data centres (India introduces 2025 bill to overhaul nuclear energy law).

Key deals, financings and platform moves

Data centre development and permitting

- **UK (Didcot, England)**: The Environment Agency is consulting on an environmental permit application by Amazon Data Services UK Limited for the **Didcot North Data Centre Campus**; permit conditions and timing remain pending public comment and agency decision (Amazon applies for environmental permit for Didcot data centre).
- **Europe (multi-country)**: Data4 reiterates a large-scale growth plan—**>€21bn investment by 2030** to **double sustainable data centre capacity in Europe**, including a **180 MW campus**

in Hanau, Germany—and calls for simplified rules/special project status to accelerate deployment (Data4 urges streamlined rules to build sovereign EU data centers).

Compute/operations stack (implications for colo/HPC design)

- **HPC/AI scheduling ecosystem**: NVIDIA acquired SchedMD (Slurm), committing to continue vendor-neutral distribution while optimising for heterogeneous accelerated clusters—supportive for broader AI/HPC adoption and potential standardisation benefits in AI factory operations (NVIDIA acquires SchedMD to advance Slurm for AI).
- **Liquid cooling supply chain**: Motivair by Schneider Electric launched new CDU products (MCDU-45 and MCDU-55) targeting high-density HPC/AI environments; **production ramp in early 2026**—relevant to deployment timing and component availability for liquid-cooled builds (Motivair by Schneider Electric launches new CDU range).

Power, grid, interconnection and energy contracting highlights

Grid connection regimes and flexibility requirements

- **Ireland (Dublin)**: Regulator lifted the de facto moratorium but with stringent conditions: new sites must have **on-site generation or batteries able to meet full demand** and be able to **export power back to the grid**; at least **80% of annual electricity demand must come from new renewable projects**; utilities/operators must publish capacity and annual renewables/emissions reports (Ireland lifts de facto ban on Dublin data-center connections).

Clean power sourcing and cross-border supply chains

- **Malaysia (Kedah)**: Google signed a **30 MW solar PPA** with a local unit of Japan's Shizen Energy; the solar farm is expected to be **operational by 2027**, supporting Google's Southeast Asia operations including data centres (Google signs 30 MW solar PPA in Malaysia with Shizen Energy).
- **US (Pennsylvania)**: Three Mile Island Unit 1 is being rebuilt and renamed **Crane Clean Energy Center** to generate **hundreds of megawatts**; **Microsoft** has signed a **long-term PPA** for electricity for nearby data centre operations (Three Mile Island rebooted to power AI data centres).
- **Indonesia–Singapore (Riau Islands export project)**: Vena Energy signed a framework supply agreement with **CATL** for up to **4,000 MWh** of EnerX BESS for a project including **>2 GWp solar** exporting to Singapore via a **subsea interconnector**. The project received **conditional approval** from Singapore's EMA in Sept 2024 and targets supply of **>2.6 TWh annually** (Vena Energy signs CATL supply deal for Indonesia–Singapore link).

Utility-scale renewables additions (relevant for corporate PPA supply)

- **South Africa**: Added **890 MW solar PV** under REIPPPP Bid Window 7 (total procurement **3,940 MW across 18 projects**, backed by **R16bn investment**). The four new projects (mostly awarded to **Red Rocket**, Free State and Northern Cape) are expected to connect within **24 months** (South Africa adds 890MW solar under REIPPPP Bid Window 7).

Energy system reforms and storage economics (India)

- **Battery storage**: India reports discovered BESS tariffs falling from **₹10.18/kWh (2022–23)** to **~₹2.1–2.8/kWh**, supported by VGF schemes totaling **>43 GWh**. India's ₹18,100 crore ACC PLI scheme is set to add **50 GWh** of domestic cell manufacturing, including **10 GWh** for grid-scale stationary storage (India cuts battery storage costs with VGF and ISTS waivers).
- **Nuclear framework**: India tabled the **SHANTI Bill (2025)** to unify/replace existing nuclear laws, supporting expansion aligned with a **100 GW nuclear target by 2047** and strengthening safety/liability/regulatory institutions—positioned as enabling round-the-clock clean power for data centres (India introduces 2025 bill to overhaul nuclear energy law).

Network infrastructure and subsea cable resilience

- **EU Cable Security Action Plan (industry input)**: The European Subsea Cables Association argues the biggest resilience risks are **bureaucracy and repair delays**, recommending notification-based repair processes, faster repair regimes, realistic stress tests, and ownership-neutral funding across critical telecoms and power subsea cables (ESCA urges EU to support market-led subsea cable security).
- **Supplier screening/monitoring and repair readiness**: Europacable recommends mandatory supplier screening, expanded monitoring technologies, and strengthened repair arrangements including market-led SLAs for repair vessels and strategic stockpiles (Europacable urges stronger EU measures for subsea cable security).
- **India (Gujarat)**: Gujarat government, GIFT City and Henox signed an MoU for a **Dhuvaran cable landing station** with potential investment of **Rs 13.17bn**, expected to create **>1,300 jobs** and support data centre capacity/connectivity (Gujarat signs MoU for Dhuvaran cable landing station).

Policy and regulatory developments

Europe: grids, security, and dual-use funding

- **European Grids Package (impact assessment)**: The Commission's preferred approach supports more coordinated EU-level planning, cost-sharing and faster permitting for electricity/hydrogen-related infrastructure to meet 2030–2040 targets, with expected system cost reductions of **up to €8bn/year by 2040** and enhanced infrastructure security (EU impact assessment for European Grids Package and preferred option; EU impact assessment for European Grids Package and permitting reform).
- **ReArm Europe / dual-use investment channels**: European Parliament adopted at first reading a regulation amending multiple EU programmes (Horizon Europe, DEP, CEF, EDF, STEP) to steer more investment into defence/dual-use technologies. Elements include a defence-focused STEP sector, opening EIC Accelerator to dual-use/critical defence technologies, and deploying AI Factories/AI Gigafactories, alongside prioritising dual-use infrastructure and military mobility corridors (EU amends programmes to fund defence and dual-use investments).

US: permitting reform and state/local friction

- **NEPA streamlining**: Reforms and guidance across Congress, the Supreme Court, and executive agencies aim to expedite energy infrastructure and data centre permitting, including defined review timelines and an expedited-review fee option (NEPA reforms streamline permitting for energy and data centers).
- **State-level pushback**: Michigan rally calls for a moratorium and greater transparency in approvals (Michigan residents rally for statewide moratorium on AI data centers).
- **Operational emissions scrutiny**: Virginia's expanded "emergency" generator guidance may become a focal point for environmental opposition and future tightening (Virginia regulators weigh expanded diesel generator use for data centers).

What to watch (next 1–8 weeks)

- Implementation details and market response to **Dublin's new connection conditions** (on-site supply/export and 80% new renewables requirement) (Ireland lifts de facto ban on Dublin data-center connections).
- Whether the **European Grids Package** preferred option translates into materially faster permitting/cost allocation decisions for cross-border and national grid expansions (EU impact assessment for European Grids Package and preferred option).

- Progress on **Amazon's Didcot North** environmental permit and any precedent-setting conditions for UK campuses (Amazon applies for environmental permit for Didcot data centre).
- Timeline/contracting structure around **Crane Clean Energy Center** rebuild and implications of Microsoft's long-term PPA for other AI clusters seeking clean firm power (Three Mile Island rebooted to power AI data centres).
- Delivery milestones for **Vena Energy's Indonesia–Singapore** export project, particularly BESS procurement (up to 4,000 MWh) and subsea interconnector pathway (Vena Energy signs CATL supply deal for Indonesia–Singapore link).
- Momentum behind **subsea cable security** proposals—risk of added bureaucracy vs faster repair regimes (ESCA urges EU to support market-led subsea cable security).