US Data Center Daily Briefing

January 30, 2026

KEY THEMES

- 1 GW greenfield AI data centre announced (India)
- Texas gas generation permitting scales for data centre load
- Local US moratoria/community opposition rising as a delivery risk
- Transmission & distribution bottlenecks increasingly constrain AI growth
- Microgrid interconnection delays (up to eight years)
- Heat reuse and grid substations as enabling infrastructure (Stockholm)
- Direct-to-chip liquid cooling as default for high-density AI
- Low-carbon concrete procurement scaling in US builds
- Power delivery efficiency innovations at board level (1,000A device)
- Cross-border GPU connectivity and POP builds in Asia-Pacific

Global data centres briefing (UTC 2026-01-30)

Top news (3)

- **A new 1 GW renewable AI campus announced in India.** AM Green to build $25bn 1GW green AI data centre plans a **$25bn**, **1 GW** fully renewable-powered AI data centre in **Uttar Pradesh**, designed for large-scale AI workloads using **solar, wind, and potential energy storage**, with emphasis on **advanced cooling** and **HPC infrastructure**.
- **Gas-fired power capacity tied to data centres continues to scale in Texas.** Texas regulators issued a major air permit for Pacifico Energy's 7.65 GW "GW Ranch" gas complex in **Pecos County**, authorizing up to **33 million tons/year** of greenhouse gases and **>12,000 tons/year** of regulated pollutants—set against a broader surge in gas projects aimed at data centre load.
- **Local opposition and permitting constraints are becoming a direct schedule risk in US markets.** The City of Madison approved a one-year moratorium on large data centers (new sites **>10,000 sq ft**) to reassess zoning, power, water and community impacts—echoing similar actions elsewhere.

Key deals and projects (by region)

Europe (Nordics / Sweden)

- **Stockholm metro build with heat reuse and grid works.**atNorth to build 30MW SWE02 heat-reuse data centre
  - **Scale:30 MW** (SWE02 metro site)
  - **Location:Stockholm**
  - **Heat reuse:** Partnership with **Stockholm Exergi**
  - **Power infrastructure:Ellevio** to construct a **new electrical substation** to support the campus
  - **Timeline:** Scheduled to go live **Q4 2027**
  - **Context:** Follows atNorth's recent Nordic expansion (new Iceland campuses; land secured in **Sollefteå** for a future mega site).

Asia (India)

- **Hyperscale-style greenfield AI announcement.**AM Green to build $25bn 1GW green AI data centre
  - **Capex:$25bn**
  - **IT load:1 GW**
  - **Power concept:Fully renewable-powered** (solar + wind; potential storage)
  - **Design priorities:** Cooling and high-performance computing infrastructure (as stated).

Asia (Japan–Indonesia–Singapore connectivity)

- **Cross-border GPU services / POP build via APN/IOWN.**NeutraDC and Ishikari sign MOU for cross-border GPU services
  - Parties: **NeutraDC** (Telkom Indonesia subsidiary) and **Ishikari Renewable Energy Data Center No.1**
  - Scope: Colocation + install a **NeutraDC POP** via **APN/IOWN**, connecting **Hokkaido Ishikari** with **Singapore and Indonesia** to enable **Neutra Connect** and **Neutra Compute** cross-border GPU services.
  - Timing: APN/IOWN link between **Hokkaido Ishikari** and **Tokyo Otemachi** due to open **August 2026**.

North America (US Midwest)

- **Large greenfield proposals meeting community pushback and incentives scrutiny.** Town hall to discuss proposed Montgomery County data centers
  - Site: Proposed **5,000-acre** area near **I-70 and Highway 19**
  - Amazon plan: **1,000-acre campus**, initially **four buildings**, expandable to **13**
  - Other proponent: **Spade Property** (~**850 acres**) with **three primary buildings**
  - Incentives: Notes a Commission-approved **tax break** for the "Green Amazon" project.
- **Indianapolis market seeing rising policy pressure.** Data center critics speak at Indianapolis sustainability meeting cited a report claiming **nearly 30** data centres proposed or under construction in **Indiana**, with residents urging the city to pause or tighten oversight (energy, water, land and grid impacts).

Power, grid, interconnection and on-site energy

United States (Texas)

- **Permitting for very large thermal generation continues, with data centres an explicit demand driver.** Texas issues permit for massive GW Ranch gas complex
  - Regulator: **Texas Commission on Environmental Quality (TCEQ)**
  - Project: **Pacifico Energy** "GW Ranch" in **Pecos County**
  - Size: **7.65 GW**
  - Permit limits: Up to **33 million tons/year** GHG and **>12,000 tons/year** regulated pollutants.
  - Broader pipeline context in the same report: A 2025 surge in gas projects for data centres; **GEM** reported nearly **58 GW** added to the pipeline.
- **Macro view: energy supply may be ample, but wires are the constraint.** S&P Global: Plenty of energy, transmission limits threaten AI warns that transmission and distribution bottlenecks—exacerbated by rising data centre and AI power needs—could constrain demand fulfilment unless grid investment accelerates.

Microgrids and storage (market constraints)

- **Interconnection delays remain a key gating item for behind-the-meter strategies.** Microgrid market adapts amid funding and interconnection challenges
  - Survey base: **150+** industry experts (Xendee research)

- Top issues: **Funding** and **utility interconnection**
- Reported delay range: Interconnection delays **up to eight years** (panel commentary)
- Economics note: Panelists said **solar-plus-battery** remains cost-competitive even after the **ITC expiration**.

- **Standards ecosystem is trying to codify design pathways.**NEMA publishes guidance on ESS and microgrids for data centres
  - NEMA released two guidance papers focused on **energy storage systems (ESS)** and **microgrids** for data centre design, positioning ESS as a way to **reduce grid impact**.

Sweden (distribution build)

- **New substation build as a direct enabler for campus delivery.**atNorth to build 30MW SWE02 heat-reuse data centre includes **Ellevio** constructing a **new electrical substation** to support the Stockholm campus.

Policy, regulation and community acceptance

United States (local)

- **Permitting pause risk (zoning + utilities + environmental review).**Madison imposes one-year moratorium on large data centers
  - Scope: New data centres and telecom centres **>10,000 sq ft**
  - Duration: **One year**
  - Intent: Review impacts across **electricity, water, zoning and community considerations** with utilities, experts and developers; potential for permanent rules.
- **Ongoing push for stricter oversight in Indiana.**City-County Council committee discusses future of data centers
  - Example project: **Metrobloks** proposing a **154-thousand sq ft** data centre at the former **Sherman Drive-In** (zoning hearing pushed to next month)
  - Some speakers called for a **six-month moratorium**.

United States (federal)

- **Nuclear rule changes tied to AI power demand.**US regulators quietly rewrite nuclear safety rules to speed SMRs
  - Actor: **U.S. Department of Energy**

- Action: Rewrote safety and security orders to accelerate **SMR** deployment linked to powering AI data centres
- Program target: **Three experimental commercial reactors by July 4**
- Investment: Described as "**billions**" in private and public investment with tech backers cited (Amazon, Google, Meta).

Europe (France, requirements snapshot)

- **Heat recovery and energy reporting requirements (effective already).** A legal summary flagged new French requirements effective **Oct 1, 2025** for facilities **>1 MW** (cost-benefit analysis and heat recovery) and energy reporting above **500 kW** in Key Real Estate and Environmental Considerations for Global Data Centers.

Technology and cost drivers (design, cooling, materials, efficiency)

- **Liquid cooling is being positioned as the default for high-density AI.** Direct-to-chip liquid cooling dominates high-density AI data centre architectures argues direct-to-chip liquid cooling plus dense electrical delivery is now the dominant architecture, highlighting practical design considerations (CDU-based closed-loop, rack manifolds, pump redundancy, heat exchanger margin, telemetry, and prioritizing economized heat rejection).
- **Embodied carbon is becoming a procurement line item in US builds.** Tech firms buy low-carbon concrete for data center buildout
  - RMI estimate: **2 million metric tons of cement** needed through **2030**, which would emit **1.9 million metric tons of CO2** if traditional cement is used.
  - Contracting signals: **Microsoft** contracted up to **622,500 metric tons** of cement from **Sublime Systems** over **six to nine years**; **Amazon** has deals with **Brimstone** and is using low-carbon concrete in **Virginia** and **Oregon**.
  - Market structure: Launch of the **Sustainable Concrete Buyers Alliance** to coordinate demand.
- **Electrical distribution efficiency is being targeted at the board level for AI loads.** AmberSemi tapes out PowerTile to cut data center power losses
  - Device: Coin-sized **1,000-amp** vertical power device ("PowerTile")
  - Claimed impact: Cut board-level power distribution losses by **85%** for AI processors
  - Example estimate from the company: Could save **225 MW/year** (worth **$160 million**) for a **500 MW** AI data centre

  - Commercial timeline: Partner evaluations later this year; initial shipping targeted for **2027**.

- **Storage and interconnect remain performance bottlenecks for AI economics.** Storage is the overlooked bottleneck for high-performance AI deployments cites a Meta/Stanford finding that storage can consume up to **one-third** of training power and recommends workload-specific storage choices and connectivity standards (UAL, Ultra Ethernet) to keep accelerators utilized.

2-line close

Market momentum is still centred on scaling AI power and cooling, while grid delivery and local permitting are increasingly determining timelines. More projects are pairing large-load announcements with explicit power, heat reuse, and materials strategies to manage constraints.