

Data Center Briefing

January 06, 2026

Global

Key themes:

Alphabet's \$4.75bn acquisition of Intersect Power (co-located power + data centre strategy); UAE dispatchable generation build-out: 1GW Al Dhafra plant reaches financial close; Rising US permitting and incentive scrutiny (Virginia pause call; Detroit health-linked permit demands; Maine local pushback); Liquid cooling consolidation and services expansion (Vertiv-PurgeRite \$1bn); India grid stability upgrades: grid-forming inverters recommended for BESS >50MW; AI infrastructure step-up: Dell/NVIDIA Rubin-era servers, 800Gb/s networking, and KV cache offload claims; Memory form-factor shift for AI: Samsung SOCAMM2 (LPDDR5 CAMM2) roadmap toward Q2 2026; Portfolio recycling in India data centres (CLINT minority stake sale to CapitaLand India DC Fund)

Global Data Centres & Digital Infrastructure Briefing (UTC: 2026-01-06)

Audience: Institutional asset managers and infrastructure fund managers (data centres, power, grid)

Top news (3)

- **Big-ticket power/compute convergence M&A:** [Alphabet to buy Intersect Power for US\\$4.75 billion](#) (cash; expected close **1H 2026**). Intersect stays standalone under CEO **Sheldon Kimber** and will collaborate with Google's technical infrastructure team on **co-located data centre and power projects; certain Texas and California assets are excluded**.
- **Dispatchable power build to serve data centres in the UAE:** [TAQA, EWEC close AED 3.6bn Al Dhafra 1GW plant](#). Financial close reached on a **1 GW gas turbine** plant (capex **AED 3.6bn**) to supply **dispatchable power** to data centres; structured at **~85% debt financing**; backed by a **24-year PPA** (signed April).

- **US permitting/political pressure rising around hyperscale growth:** [Virginia urged to pause hyperscale data center approvals](#). The Piedmont Environmental Council asked the General Assembly for a pause pending full accounting and a transparent plan for **grid, water, air, and community** impacts; notes a warning to **FERC** about reliability/affordability risks and cites the state's data centre **sales tax exemption costing \$1.6bn in FY2025**.

Key deals and corporate actions

North America

- **Cooling services consolidation:** [Vertiv completes \\$1 billion acquisition of PurgeRite to boost cooling](#). Vertiv completed a **\$1bn** acquisition to expand thermal management and **liquid cooling services** for AI/high-density deployments; the story cites liquid cooling market forecasts of **\$17.7bn by 2030** (Grand View Research) and a **\$15bn opportunity by 2028** (Dell'Oro Group).

Asia

- **India (portfolio recycling / fund alignment):** [CapitaLand India Trust divests minority stakes in three data centres](#). CLINT agreed to sell **20.2% stakes** in **three under-development** data centre assets to the CapitaLand India Data Centre Fund for **~Rs 7bn (\$99.7m)**; the fund also receives a **right of first offer** on **CapitaLand DC Bangalore** (Bengaluru).
- **Singapore (vendor capex into AI-DC enablement):** [Johnson Controls to invest \\$60m expanding Singapore data centre hub](#). Johnson Controls plans up to **\$60m over five years** to expand its Singapore Innovation Centre, lift engineering headcount to **90-100**, and focus on **advanced cooling and automation** for AI-driven data centres; includes **prototype development/testing** with universities/industry partners and deployment of **OpenBlue** and **Cooling-as-a-Service** across APAC.

Americas (people / platform execution)

- **Ops/services leadership:** [Salute appoints Robert Heikaus as MD Americas for data centers](#). Appointment of **Robert Heikaus** as Managing Director, Americas (mission-critical background including **CBRE GWS** and **IBM**).

Power and grid / interconnection highlights

Middle East (UAE)

- **Firming capacity explicitly tied to data centres:** [TAQA, EWEC close AED 3.6bn Al Dhafra 1GW plant](#)
 - **Size/capex:** **1 GW** gas turbine; **AED 3.6bn**.
 - **Contracting/tenor:** **24-year PPA** (signed April).

- **Financing: ~85% debt-financed** via a consortium of local/international banks.
- **Strategic frame:** positioned to supply **dispatchable power** for data centres and support the **UAE National Strategy for Artificial Intelligence 2031**; described as part of a broader **AED 36bn** investment plan with Masdar (renewables + storage expansion).

India

- **Grid stability toolkit for renewables + storage (relevance for data-centre-adjacent BESS and grid upgrades):**[India examines grid-forming inverters to bolster renewable integration](#)
 - Grid-India discussion paper recommends **phased adoption of grid-forming (GFM) inverter** capability as India targets **500 GW non-fossil** capacity.
 - Simulations (Rajasthan focus) indicate **GFM outperforms grid-following inverters during disturbances**.
 - Recommendation: **BESS above 50 MW** to include **GFM capability**, plus **grid code updates** and **pilot projects**.

United States

- **Reliability and affordability flagged amid hyperscale concentration:**[Virginia urged to pause hyperscale data center approvals](#) references a warning to **FERC** about reliability/affordability risks.

Policy / regulation / permitting

United States (state and city-level scrutiny)

- **Virginia (approvals + incentives under review):**[Virginia urged to pause hyperscale data center approvals](#)
 - Call for a pause on approvals and a **transparent plan** covering grid, water, air, and community impacts.
 - Incentive magnitude highlighted: data centre **sales tax exemption cost \$1.6bn in FY2025**.
- **Detroit, Michigan (health-linked permit conditions):**[Detroit must require health-protective data center approvals](#)
 - Advocates for **health impact assessments, 24/7 clean energy procurement tied to approvals, closed-loop cooling, strict diesel testing**, and **fence-line monitoring** as permit requirements.
- **Maine (local transparency / siting pushback):**[Maine communities urged to scrutinize AI data center proposals](#)
 - GrowSmart Maine released a **community guide** and urged towns to demand transparency; notes **protests in Lewiston** regarding a

proposed AI data centre at the **Bates Mill** complex ahead of a **Dec. 16, 2025** city council vote.

Sustainability framing (operational and compliance risk)

- **Energy + e-waste as constraints on growth:** [Data center growth raises energy and e-waste sustainability concerns](#)
 - Cites US expansion with **1,240** data centres built/approved by end-2024 and notes **Virginia data centres used ~26% of electricity in 2023**.
 - Highlights global e-waste volumes (**62m tons in 2022**) and claims generative AI could add **1.2-5m tons annually**.
 - Notes Illinois bills **H.B. 3758 / S.B. 2497** targeting **15 GW** of energy storage and virtual power plant programs.

AI infrastructure, networking, and data-centre hardware implications

NVIDIA/Dell platform updates (density, networking, and inference optimization)

- **Next-gen AI racks and high-speed fabrics announced by a major OEM:** [Dell and NVIDIA unveil next-gen AI infrastructure and networking](#)
 - PowerEdge servers integrated with **NVIDIA Vera Rubin NVL72** (claimed **3.6 exaflops** and **75 TB memory**).
 - Support for **HGX Rubin NVL8** (claimed **~400 petaflops**), with **BlueField-4 DPUs** and **800 Gb/s ConnectX-9**.
 - Networking: PowerSwitch with **NVIDIA Spectrum-6** (claimed **102.4 Tb/s** switching; up to **512x800G** CPO ports).
- **Inference performance lever (KV cache offload):** [Dell and NVIDIA advance KV Cache with BlueField-4 CMS](#)
 - KV Cache offloading for LLM inference combining **NVIDIA BlueField-4** with Dell storage (PowerScale, ObjectScale, Project Lightning).
 - Dell claims up to **19x** improvement in **Time to First Token** and up to **5.3x** higher **queries per second** using its KV cache offload solutions.
- **Scaled reference design direction:** [NVIDIA launches Rubin platform and DGX SuperPOD scale-out](#)
 - Introduced **Rubin platform** (codesigned stack of six chips) and Rubin-based **DGX SuperPOD** configs (DGX Vera Rubin NVL72 and DGX Rubin NVL8).
 - Claimed performance up to **28.8 exaflops FP4**; availability indicated for **2H this year**.
- **Security/acceleration integrated into validated stacks:** [NVIDIA integrates BlueField cybersecurity into Enterprise AI Factory](#)

- Enterprise AI Factory validated design expanded to include **NVIDIA BlueField** cybersecurity and infrastructure acceleration; validated partners include **Armis, Check Point, F5, Fortinet, Palo Alto Networks, Rafay, Red Hat, Spectro Cloud, Trend Micro**.

Memory and component roadmap

- **New memory form factor positioned for AI data centres:** [Samsung unveils SOCAMM2 LPDDR5 memory for AI data centers](#)
 - Samsung introduced **SOCAMM2** (LPDDR5-based **CAMM2** module), claiming up to **2× DDR5 bandwidth** with materially lower power.
 - Notes **JEDEC standardized CAMM2** features including ECC; **SK Hynix** pledged support; expected launch around **Q2 2026** alongside Nvidia's **Vera Rubin** platform.

2-line close

Compute, cooling, and power stacks are being designed and financed together—vendor roadmaps and utility-grade generation are moving in lockstep. Local permitting, incentive scrutiny, and grid-stability requirements are increasingly the gating items for hyperscale delivery timelines.