US Data Center Daily Briefing

March 06, 2026

KEY THEMES

- CBRE: 5,994.4MW under construction as permits and power stall projects
- Dominion 765kV Joshua Falls–Yeat line sized for ~1.8GW data centres
- Redwood Materials $425m Series E with Google, Nvidia for grid-scale storage
- National Grid £3bn EGL3 2GW HVDC link, commissioning late 2033

North American data centre demand may be red-hot, but the build machine is starting to choke on permits and power. CBRE says capacity under construction has slipped to 5,994.4MW (down 5.5% vs 2024) because zoning, permitting, and power-sourcing delays are stalling projects—and grid capacity is "largely booked through 2030." That dovetails neatly with what's happening on the ground: utilities are now planning multi-gigawatt transmission specifically to feed future data centre clusters.

The Big Stories

CBRE: Permitting and power delays constrain North American data center construction is the cleanest snapshot of the market's new bottleneck. Despite record demand in 2025, CBRE points to project slowdowns driven by permitting, zoning, and—most importantly—power availability, with grid capacity effectively spoken for into the next decade. Pricing is reacting: rental rates rose 6.5% for 250–500kW deployments and 12.5% for 3–10MW. The implication is blunt: the "where can I get power" question is now setting the competitive map more than land, tax breaks, or even fibre.

In Virginia, you can see what "power-first development" looks like in utility planning. The Piedmont Environmental Council details how Dominion and partners are proposing a 115-mile, 765kV Joshua Falls–Yeat transmission line terminating at a Yeat substation near Richardsville to serve future data centres—about 1.8GW of load in the frame (Dominion proposes Yeat substation; Maroon Solar CUP returns). That's not incremental reinforcement; it's major backbone infrastructure designed around data centre growth. The other half of the story is friction: local permitting, stormwater questions, and environmental concerns (including rare plants) are already part of the timeline risk.

If grid access is constrained, storage starts to look less like an add-on and more like a prerequisite. Redwood expands into grid-scale energy storage with $425M signals that big tech

is leaning into that reality: Redwood Materials raised $425m (Series E), with Google joining Nvidia as strategic investors, to scale "Redwood Energy" into grid-scale storage using second-life EV batteries. The framing matters: it's explicitly tied to US data centre load growth. Read this as a bet that the next wave of capacity won't be won purely with new generation—firming, flexibility, and grid services are becoming investable parts of the data centre power stack.

Europe has its own version of "power is destiny," but the responses are increasingly long-lead and transmission-heavy. National Grid awards £3bn contracts for EGL3 HVDC link puts nearly £3bn behind a 690km HVDC link (Eastern Green Link 3) that will transmit up to 2GW between converter stations in Aberdeenshire and West Norfolk. Construction is due to start in 2028, with commissioning in late 2033—an eternity in AI infrastructure terms, but exactly the kind of project that ultimately determines where power-intensive compute can scale without breaking the system.

On the demand side, the "sovereign cloud" narrative in Africa is shifting from talk tracks to product launches—though details are still thin. Cassava launches National Sovereign Cloud for African governments bundles sovereign cloud, cybersecurity, AI compute, local-language AI models, and an AI Institute, plus payments/remittances and conversational AI for national digital platforms. No funding or timeline was disclosed, which is the key watchpoint: sovereign positioning is politically attractive, but execution will hinge on where Cassava can secure reliable power, connectivity, and enough AI-capable infrastructure to deliver more than a policy-aligned label.

Behind the Headlines

AI is not just "more load"—it's nastier load. AI Drives Rapid Evolution of Data Center Infrastructure describes microsecond-scale power fluctuations and rack densities already pushing beyond 40kW, forcing changes in UPS design and liquid cooling approaches. The striking number is the roadmap direction: industry targets (including NVIDIA) stretching toward 600kW–1MW per rack. If you're wondering why grid queues, substation upgrades, and on-site power discussions are suddenly everywhere, this is the physical reason: the electrical and thermal transients of AI hardware are rewriting what "data centre compatible" power and cooling even mean.

Survey data is now catching up to what engineers have been muttering for a year: average facilities are getting bigger and denser fast. AFCOM report: Data centers scale up for AI demand puts average facility size near 38MW and average rack density at 27kW per rack, with 72% expecting AI to increase capacity needs. The interesting tell is adoption mix: 36% using

liquid cooling, 25% deploying on-site power, and 38% using renewable energy today. Translation: the industry isn't waiting for perfect grid conditions—operators are actively assembling hybrid solutions (cooling + on-site power + renewables) to keep deployment schedules from being dictated by utility timelines.

Network architecture is being pulled into the same AI gravity well—and Nokia is quantifying it in a way that's hard to ignore. Nokia says AI drives 'token certainty' for networks cites 1.3 trillion annual network sessions, 100 trillion tokens per day, and 77 exabytes/month of AI traffic, pushing a shift toward "token certainty" architectures and dense optical fibre links between data centres. The data centre implication is straightforward: as AI traffic patterns become more latency- and throughput-sensitive, interconnect becomes a strategic constraint, not a nice-to-have. And it connects back to today's power stories: the winning sites will be the ones that can secure both megawatts and the fibre to move AI-scale data between clusters.