TELBORG

Data Center Briefing

January 02, 2026

Global

Key themes:
Malaysia data-centre demand: 49 projects, up to 7 GW; SMR financing steps in Sweden: Ringhals 1,500 MW; US wastewater/permitting scrutiny for new data centres; Transformer availability and lead times remain a constraint; Microgrids/DER/BESS positioned for resilience and capacity; US state incentives and broadband/pole-ROW policy activity; Corporate PPAs tied to data-centre load (Google Ohio); India policy enabling private nuclear; SMRs framed for data centres

Data centres & digital infrastructure — Global briefing (UTC 2026-01-04)

Top news (3)

1. **Malaysia: grid/power demand and renewables pipeline accelerating**

- Tenaga Nasional Bhd (TNB) has agreements for **49 data centre projects** that could require up to **7 GW** of electricity demand; Malaysia's **CRESS committed capacity reached 1.3 GW** (as of June 2025). The government is also preparing **LSS6 solar tenders** that could add **up to 2 GW** and create **RM6 billion** in construction jobs. See: Malaysia ramps up LSS6 solar and CRESS for data centres.

2. **Sweden: SMR development at Ringhals with new equity funding**

- Vattenfall and Industrikraft i Sverige AB agreed to co-invest to advance a **1,500 MW SMR** project at Ringhals; Industrikraft will take a **20% stake** in Videberg Kraft AB and invest **SEK 400 million (~$42.2m)**, contingent on **state risk-sharing**. See: Vattenfall and Industrikraft advance SMRs at Ringhals site.

3. **US: environmental permitting and "behind-the-meter" constraints remain central**

- Ohio EPA extended comments to **Jan 16** on a draft **general wastewater permit** for new data centres that would allow treated wastewater discharge under NPDES-style language referencing a “lowering of water quality.” See: Ohio EPA considers permit allowing data center wastewater discharge.

Key deals & projects (data centres, telecoms, and large energy contracts)

Corporate renewable procurement (data-centre linked)

- TotalEnergies signed a **15-year PPA** to supply **1.5 TWh** to **Google’s Ohio data centers**. Details are included in: Vattenfall and Industrikraft advance SMRs at Ringhals site.

Site redevelopment theme (power + data centre)

- Plans are being discussed to convert the retired **Homer City coal plant** site (Pennsylvania) into a **gas-fired power plant and data center**, with concerns raised about grid and community impacts. See: Pennsylvania 2025: Mineland Reforestation, Coal Plant Data Center.

Private wireless (port / industrial connectivity)

- Grand Port Maritime de Marseille awarded **ORAXIO TELECOM SOLUTIONS** an **EUR 85,500** contract for a feasibility study on deploying **private 5G and LoRa**. Contract concluded **15/12/2025**; study period **01/09/2025–01/09/2026**; award weighting **Quality 60% / Price 40%**; **14 electronic tenders** received. See: Marseille port commissions study for private 5G and LoRa.

Power, grid, and interconnection highlights

Equipment bottleneck: transformers

- Wood Mackenzie / POWER report an ongoing US transformer deficit in 2025: **~30% shortfall** for power transformers and **~10%** for distribution units, despite **~$1.8–$2.0bn** in new North American manufacturing investments by firms including **Hitachi Energy, Siemens Energy, and Eaton**. A broker (Bolt Electrical LLC) disputes the framing, citing standard-unit delivery in **12–14 months** and **12%–15%** service margin. See: U.S. transformer shortage persists despite major factory investments.

Grid resilience / behind-the-meter architecture

- Distributed energy resources (DERs), microgrids, and BESS are being positioned as reliability tools; SDG&E launched **four microgrids** and utilities are exploring VPPs and demand response. Analysts project the global BESS market could reach **$120–$150bn by 2030** (over **$30bn** in

the US). See: Distributed energy resources boost grid resilience and reliability.

Technical design note relevant to data-centre distribution

- Guidance highlighted a common preference for **Delta-primary / Wye-secondary (D/y)** transformer configurations in many commercial/industrial/data-centre settings for **harmonic noise suppression** and a **grounded neutral**. The piece also contrasts dry-type vs liquid-filled transformers, noting ranges such as cast-resin dry-type up to **36 kV / 40 MVA** and liquid-filled spanning **6 kV–1,500 kV** and **>1,000 MVA**. See: Selecting the Right Three-Phase Transformer Configuration for Distribution.

Forward-looking demand commentary (AI load)

- Industry forecasts emphasize uncertain but potentially large AI-driven load growth; examples cited include the **Hale Kuawehi 30 MW PV + 30 MW/120 MWh** project, IEA's **3.68 TW** solar projection by 2030, National Grid's **£35bn** supply-chain investment, and Dominion's **$2.1bn** transmission spend last year. See: Industry leaders map power sector challenges and opportunities 2026.

Policy & regulation (permitting, incentives, and nuclear)

US: state-level broadband + data-centre incentives

- State legislatures considered **600+** broadband bills in 2025; fewer than **140** became law. Enacted measures emphasized permitting, pole/ROW access, penalties for theft/vandalism, state broadband funding, and **incentives for data centers**; the story notes **at least 37 states** passed data-centre incentives and **1,000+ AI-focused bills** were introduced. Examples: Hawaii **H 934** (Broadband Office backed by **$400m**); West Virginia **SB 907 / HB 2014** (funding and microgrid districts for data centers). See: States pass broadband laws focusing on infrastructure and data centers.

US: environmental permitting posture for AI buildout

- Commentary argues EPA leadership is prioritizing regulatory relief to speed construction of data centers and chip factories for AI, while not using AI tools to improve environmental protection; it calls for a modernized Project XL-style pilot. See: EPA clears regulatory path for AI infrastructure, snubs AI for protection.

US: local political scrutiny of data-centre approvals

- A Michigan state representative called for closer review of new data centres after the Michigan Public Service Commission approved a **Saline Township** facility and required **DTE** to absorb potential rate impacts; the same piece

discusses water affordability/pollution bills. See: Michigan lawmaker on data centers, water affordability and pollution.

India: enabling private nuclear and SMR positioning for data centres

- India's Union Minister stated SMRs could power AI-focused data centres and railways, citing containerized designs on **14 acres** and **15–30 MW** unit sizes. The **SHANTI Bill** has passed both houses and received presidential assent, enabling **private companies to build nuclear plants**. See: India promotes small modular reactors for data centres and railways.

Other notable tender activity (non-data-centre, but relevant contracting signals)

- A Polish museum launched an open tender for renovation/restoration works (ERDF co-financed) with bidder requirements including financial capacity of **PLN 10,000,000** and a **PLN 1,500,000** bid bond; submissions due **30/01/2026**. See: Renovation and conservation works at Kaczkowski Palace in Krosno.

2-line close

Grid-facing constraints and permitting remain as important as real estate in determining data-centre delivery timelines. Capital is increasingly tracking optionality in on-site/firm power (SMRs, microgrids, storage) alongside conventional utility procurement.