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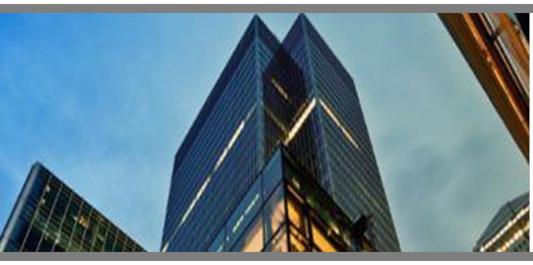
Securitized Products Special Topics

Demand Flexibility: Data Centers Are Not Standalone Properties



Load Shifting Ties Together Otherwise Separate Data Centers

Growing focus on power demand flexibility and shifting workloads may upend underwriting and investment in data centers as standalone properties. Data centers increasingly could become flexible in their power demand. Instead of maintaining constant, pre-defined workloads, data centers may reduce their workloads in response to peak-time grid signals or other external drivers.

To facilitate demand flexibility, operators could shift workloads across different sites. Such “load shifting”, or so-called “spatial flexibility,” could move workloads across different sites and geographic regions. For example, operators shifted workloads in tests and case studies from Virginia to Illinois in Oracle data centers, or potentially “halfway across the country”.

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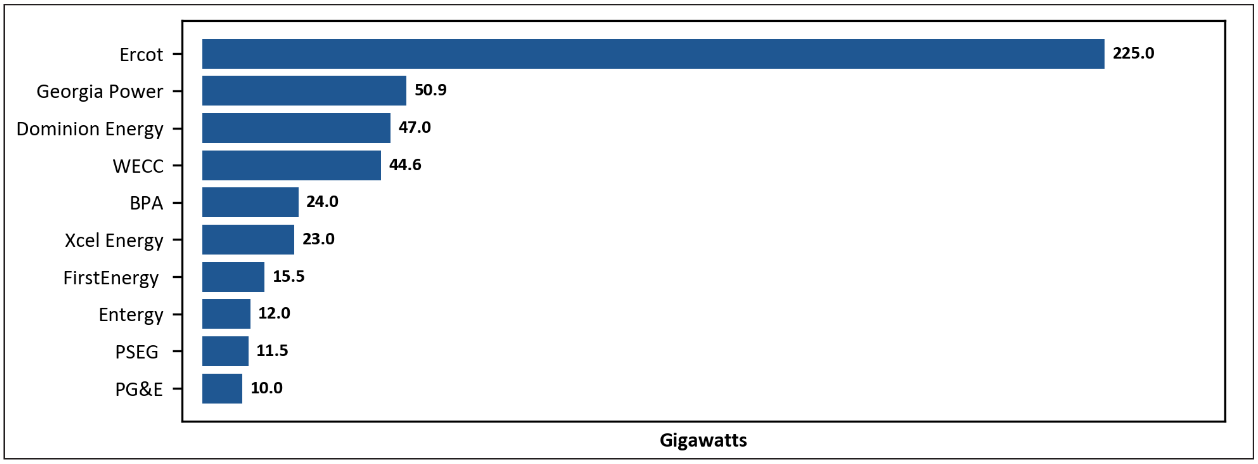
Increased adoption of workload shifting could make different data center properties highly inter-dependent. Investors will need to consider not just the workload and power arrangements of a specific property they underwrite, but also the parameters of other properties that may send or receive workloads from a “power flexible” property. Data center tenants also will have to be on board. Some tenants, especially in colocation data centers, may not be agreeable to load shifting.

Faster Grid Connection and Regulatory Pressures Drive Power Flexibility

Data center operators introduce demand flexibility to get faster grid connections, or in response to regulatory or utility company pressures. Grid operators and utilities state they may ease grid connections for power flexible properties, amid significant “large load” queues (Figure 1).

Figure 1. Large Load Queues in Selected US Grids



Source: BloombergNEF, company filings, press releases, and Academy Securities

Regulators are dialing up their efforts on making data centers power flexible. The focus on power flexibility joins a variety of other approaches regulators have been adopting to shield residential ratepayers from real or perceived data center costs, such as data center tariffs or revisiting data center grid approvals.[1]

- **Federal regulators direct grid operators to focus on flexible large loads.** The Federal Energy Regulatory Commission (FERC) issued last month a series of orders to grid operators, that emphasize the need for large load flexibility, among other directives. Grid operators now are required to respond within 60 days, kicking off parallel proceedings to implement the FERC directives.
- **States also are focused on load flexibility.** A notable example is Senate Bill 6 in Texas. SB 6 requires that loads above 75MW demonstrate operational flexibility before interconnecting to the grid.
- **Utility companies introduce flex-driven interconnection programs.** One example is Silicon Valley Power in Santa Clara, which is advancing a "Flexible Load Interconnection Program". The program will offer data centers expanded grid access in exchange for verifiable, dispatchable flexibility.

Next Generation Power Flex Data Centers on the Horizon

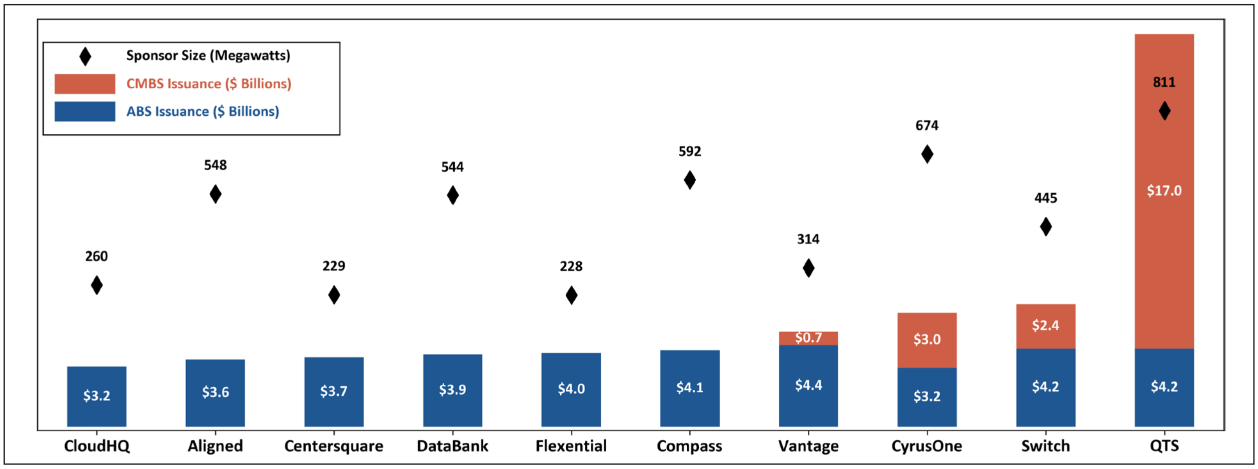
Investors are poised to see a new class of AI data centers purposefully developed to operate as "flexible energy assets". This will underscore the focus on underwriting load flexibility considerations. A notable case study is the development of the Aurora AI Factory in Manassas, VA. The developers, including NVIDIA and Digital Realty, expect the 96MW data center to come online in later 2026. Relatedly, Nvidia and Emerald AI, a firm developing power flex platforms, recently announced they are working with power companies on development of next generation power flexible data centers.

It is not clear (at least to us) to what extent and how quickly existing data centers can adopt demand flexibility. Casual review of descriptions of power flex platforms suggest properties may be able to incorporate dedicated software solutions to introduce demand flexibility. It is possible data centers backing outstanding deals can become power flex properties.

Deal documents of recent data center transactions do not provide much disclosure on demand flexibility or load shifting. As such, investors may not be aware of any inter-dependence of their data center exposures on other properties, if such cross-property connection exists. Sponsors/operators of large data center portfolios may be better able to introduce demand flexibility (Figure 2). Large geographical portfolios enable workloads to be redistributed across sites.

1 "Stranded Assets: Intertwining Power Plants and Data Centers Performance," Securitized Products Special Topics, Academy Securities, February 5, 2026

Figure 2. ABS and CMBS Data Center Sponsors



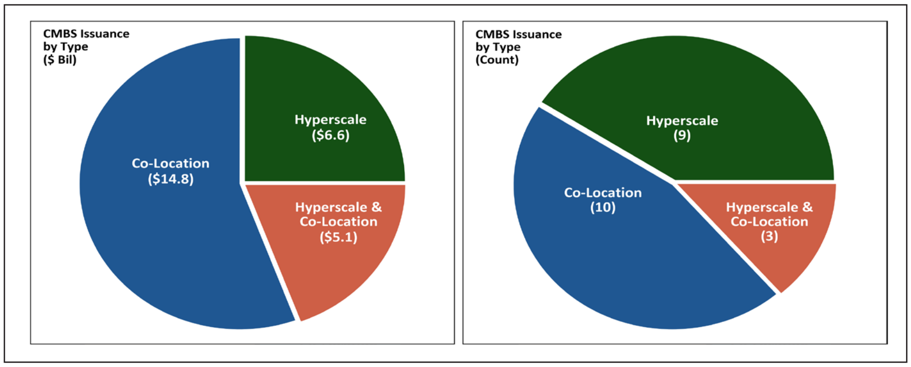
Source: Bloomberg, ABI Research, deal documents, and Academy Securities

Hyperscale AI Facilities More Capable to Shift Loads

The prospects for new class of power flex data centers coming online, or the introduction of power flex capabilities to existing data centers, warrants attention to several aspects:

- **Check workload type – some types can more easily adopt flexibility.** AI training facilities can be well suited to provide flexibility, according to BloombergNEF market analysis. Large model development jobs are not latency-sensitive and can be relocated. In contrast, AI inference and cloud services are less adaptable. Real time performance, latency, and customer requirements limit when and where workloads can be shifted.
- **Colocations less adaptable to flexibility.** In colocations diverse tenants usually control the workloads, making any property-wide load shifting cumbersome (Figure 3). Single-tenant, hyperscale facilities are best positioned for demand flexibility.

Figure 3. CMBS Data Center Type



Source: Bloomberg, deal documents, and Academy Securities

- **Track interconnection or flexibility agreements.** As regulators and utility companies apply more pressure on data centers to adopt demand flexibility, interconnection agreements will lay out the kind of flexibility data center operators commit to. Operators can employ flexibility in several forms, including peak relief, congestion relief, and grid balancing, among others. Not all forms of flexibility require workload shifting. The data center flexibility commitments can inform investors on the property practices they need to underwrite.

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