

PROPERTY &amp; CASUALTY

# Powering the Future of Digital Infrastructure

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## Executive Summary

The rapid expansion of data centers and digital infrastructure driven by artificial intelligence, cloud adoption, and high-performance computing has fundamentally altered the role of power within the sector. Electricity is no longer a commoditized operating expense; it is a strategic input that directly impacts site selection, project timelines, insurability, and access to capital.

As Brown & Brown's Global Energy & Climate Tech Practice, we see power generation strategy emerging as one of the most consequential risk decisions facing data center owners, developers, operators, and investors. As grid constraints intensify and demand accelerates, digital infrastructure platforms are increasingly investing in onsite generation, hybrid power architectures, and direct relationships with energy assets. This convergence of digital infrastructure and power generation is reshaping risk profiles — and redefining how insurance and financing must be structured.

## The New Power Reality for Digital Infrastructure

Modern data centers, particularly hyperscale and AI-focused facilities, require unprecedented levels of reliable, high-quality power. Power density per rack continues to rise, tolerance for interruption continues to fall, and the financial consequences of downtime have escalated materially.

As a result, leading platforms are prioritizing:

- Power availability, quality, and speed to energize as primary site-selection criteria
- Redundancy across generation, transmission, and distribution
- Long-term cost certainty and alignment with sustainability commitments
- Strategic integration of non-wires connected power solutions

These pressures have driven a shift away from exclusive reliance on traditional utilities toward onsite and behind-the-

meter power solutions, including gas-fired generation, fuel cells, energy storage systems (ESS) geothermal, advanced nuclear, solar/other renewables among others.

From a risk perspective, this evolution effectively transforms data center power providers into quasi-utilities, introducing exposures historically associated with investor-owned utilities rather than pure technology operators.

## Onsite Generation and Hybrid Power: Opportunity with Risk Complexity

Onsite and behind-the-meter generation has become a critical tool for mitigating grid congestion, accelerating development timelines, and enhancing operational resilience (especially critical for Tier III and Tier IV data centers). However, it also introduces new and often underestimated risk considerations.



Key insurance and risk issues include:

- Property and equipment breakdown exposure related to turbines, engines, fuel cells, transformers, switchgear, and supply chain dependency
- Fuel and emissions risk, including storage, and regulatory compliance
- Operational liability, particularly where facilities operate in parallel with or export power to the grid
- Amplified business interruption exposure, where a single power asset failure can cascade across the entire facility

Hybrid power supply and demand combining renewables, ESS, dispatchable, and grid supply—further complicate loss modeling. Insurers now focus not only on redundancy, but on system interaction under stress scenarios, including black-start capability, transition failures, and common-mode losses.

## Insurance Market Dynamics: What Underwriters Expect

Insurance capacity remains abundant, and insurers are increasing available limits to deploy for digital infrastructure, but underwriting scrutiny has increased meaningfully—particularly where power assets are integral to operations.

Underwriters are prioritizing:

- Quality submissions
- Demonstrated redundancy and fault tolerance across power systems
- Physical separation of critical assets to limit aggregation losses

- Robust maintenance, monitoring, and OEM service agreements
- Clearly documented fuel strategy and emissions management
- Alignment between power contracts, indemnities, and insured exposures

Battery storage and emerging technologies continue to face uneven appetite, often requiring higher deductibles, sublimits, or standalone placements. Sophisticated operators are responding by utilizing captives, layered programs, and alternative risk transfer solutions to manage volatility and protect balance sheets. Early engagement with insurers and risk engineers has become essential to preserving capacity and pricing efficiency.

## Lender and Financing Requirements: Power as a Credit Issue

One of the most notable developments we see at Brown & Brown Global Energy & Climate Tech is how lenders increasingly view power strategy as a core credit consideration, rather than a secondary operational detail.

For financed data center projects, lenders are now focused on:

- Long-term certainty and durability of power supply and quality over the loan tenor
- Exposure to grid congestion, curtailment, or regulatory intervention
- Alignment between power availability and contracted revenues
- Insurability of power assets and associated business interruption risk

## Common lender expectations include:

- Comprehensive property, equipment breakdown, and time-element insurance covering both data center and power assets
- Insurance limits and indemnity periods that reflect current power density and revenue assumptions
- Clear delineation of responsibility between owner, operator, utility, and power providers
- Confirmation that deductibles, exclusions, and sublimits do not impair debt service continuity

In more complex power configurations—such as onsite generation or private microgrids—lenders may also require:

- Separate insurance placements for power assets
- Enhanced loss payee and additional insured provisions
- Step-in rights tied to insured events
- Independent insurance advisor and risk engineering review prior to financial close

Projects that fail to address these considerations early often face financing delays, increased cost of capital, or last-minute restructuring of insurance programs.

## Conclusion: Power Strategy Is Risk Strategy

Power generation has become inseparable from the digital infrastructure value proposition. Decisions around power sourcing, generation, quality, and redundancy now directly influence insurability, financing outcomes, and long-term asset performance.

Brown & Brown's Global Energy and Climate Tech Practice believes the most successful digital infrastructure platforms are those that:

- Integrate risk management to power design from inception
- Engage lenders, insurers, and advisors early in the development cycle
- Treat power assets with the same rigor as core digital infrastructure
- Use insurance to not simply satisfy a contractual requirement, but as a strategic enabler; empower long-term predictable financial results

As digital infrastructure continues to scale, power strategy will increasingly determine who can build, who can finance, and who can operate with confidence.





## How Brown & Brown Can Help

Connect with our Brown & Brown team to learn about our knowledge in your industry, how we build our risk mitigation strategies and how we can aid your business in building a cost-saving program.



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