

Article Overview

Data center regulations in the U.S. are governed by a combination of federal, state, and local laws, focusing on energy, water, environmental impact, and operational reliability.

Federal Regulations

At the federal level, data centers must comply with environmental and safety laws, including the Clean Air Act, National Environmental Policy Act (NEPA), and the Endangered Species Act. The EPA sets national ambient air quality standards for pollutants such as carbon monoxide, nitrogen dioxide, ozone, particulate matter, sulfur dioxide, and lead, which apply to both new and existing data centers. Large-scale AI data centers often require on-site backup power fueled by diesel or natural gas to ensure uninterrupted operation in case of grid failure .

State and Local Regulations

State and local governments impose additional requirements, often focusing on energy consumption, water usage, and zoning. For example, in Texas, the Public Utility Commission and state legislature have introduced regulations to manage the impact of large data centers on the electric grid and local resources. SB 6, signed into law in 2025, requires large load customers (like data centers exceeding 75 MW) to contribute to interconnection costs, disclose on-site backup generation, and report energy usage. These measures aim to balance business growth with grid reliability and prevent infrastructure costs from being passed to residents . Local authorities may also regulate water-intensive operations, especially in drought-prone areas. Proposed regulations include requiring closed-loop cooling systems, annual reporting of water and electricity use, and reconsideration of sales tax exemptions for data centers . Community concerns often focus on resource strain, environmental impact, and quality of life, prompting moratoriums or stricter permitting processes in some counties.

Best Practices for Compliance

Developers are encouraged to:

- o Conduct environmental impact assessments early in the planning process.
- o Implement energy-efficient and water-conserving technologies, such as closed-loop cooling and renewable energy integration.
- o Maintain on-site backup power to meet reliability standards.
- o Coordinate with local utilities and regulatory agencies to ensure compliance with interconnection and reporting requirements.
- o Monitor and report energy and water usage to relevant authorities to maintain transparency and regulatory

compliance .

Key Takeaways

Data center regulation is fragmented and multi-layered, requiring compliance with federal environmental laws, state energy and utility rules, and local zoning and resource management policies. In regions like Texas, legislation is evolving to address the rapid growth of AI-driven data centers, balancing economic development with grid reliability, water conservation, and community concerns . Developers must navigate this complex landscape to ensure sustainable and legally compliant operations.

EU Data Center Regulations 2026: What Operators Need to Know EED reporting, Germany's PUE 1.2 law, GDPR

In recent months, states across the country have shifted their approach to data center regulation. More than 300 data

Top regulatory requirements on ensuring compliance across data center operations,

The European Commission has published a draft regulation shaping a common EU-wide rating scheme for data

In early 2026, policymakers across the US began proposing new limits on data center expansion. Lawmakers in nine states have

Explore the latest news and expert commentary on Regulations brought to you by the editors of Data Center Knowledge

27 states are advancing data center bills on energy costs and moratoriums, pushing back

State and local regulation of data centers is rapidly expanding across numerous domains,

Though there are common international data center security standards, like ISO9001 and SOC 1, SOC 2, and SOC 3, there are also

6 Feb 2025 Many US data center operators have remained complacent about the potential for regulations being imposed in the US.

This article explores the key regulations that impact data centers and outlines the technical and administrative policies

Data Center Regulations

Data center compliance is essential for cybersecurity and operational excellence, aligning

By 2025, data center operators will need to have a robust understanding of new regulations and their implications.

Think it won't happen for another decade? Think again: data center regulations could be coming in just a year or two,

This website provides a central location for those looking to learn more about CAA regulations, guidance, and technical

Discover the importance of data center compliance, key components, and different compliance standards in various industries.

Web: <https://www.supremeacademicresearch.co.za>

