



# THE STATE OF FLEXIBLE LOAD MANAGEMENT

How energy professionals are adapting  
to the new era of power demand

January 2026

# Executive Summary

The U.S. power grid is experiencing a period of sustained, high-intensity demand. Rapid growth in data centers, AI-driven compute, and electrification across commercial and industrial (C&I) sectors is turning capacity and reliability from long-term planning challenges into daily operational constraints.

Findings from an OBM survey of 105 U.S. energy professionals show that flexible load management is now a critical energy strategy. Power suppliers are accelerating demand response (DR) and flexible load programs to manage volatility, protect reliability, and keep pace with increasingly large and dynamic loads. Momentum is strong, but scaling remains limited by cost, regulatory uncertainty, technology integration challenges, and customer adoption.

The data also signals a shift in mindset. Large energy users are increasingly viewed not just as sources of strain, but as potential partners in grid stability through onsite generation, storage, backup systems, and flexible operations. Looking ahead, flexibility is set to become a core operational pillar of grid resilience.

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## KEY TAKEAWAYS

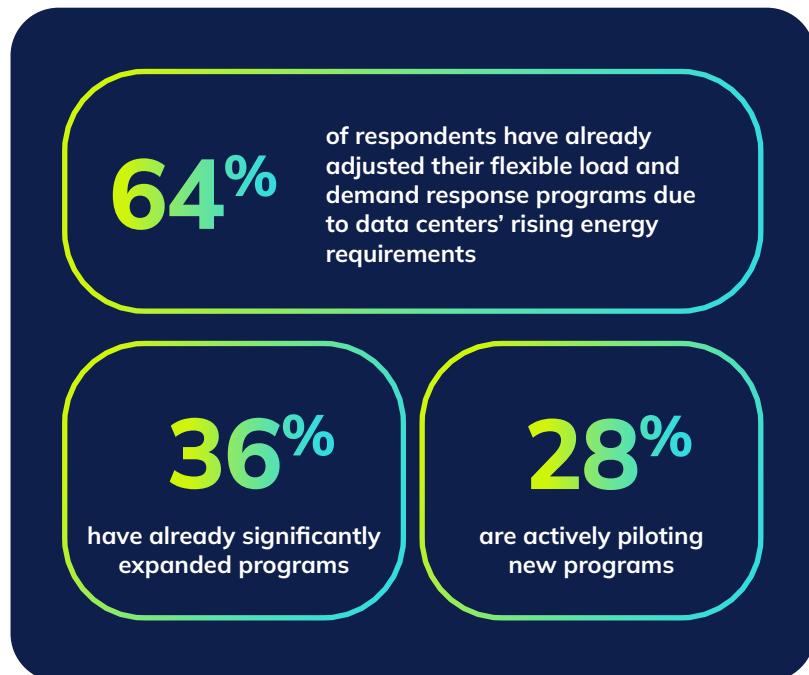
- ✓ **Flexibility is mission-critical:** Load flexibility is now foundational to reliability, forecasting, and economic grid operation.
- ✓ **Investment is accelerating:** Most energy professionals expect significant growth in demand response and flexible load funding.
- ✓ **Scaling is the challenge:** Cost, regulation, system integration, and lack of customer awareness slow progress.
- ✓ **Data centers are part of the solution:** Increasingly seen as grid partners, not just large loads.
- ✓ **2030 will be defined by flexibility:** Many power suppliers plan to manage a majority of load through flexible or controllable programs.

# Flexible Load in the Age of the Data Center Boom

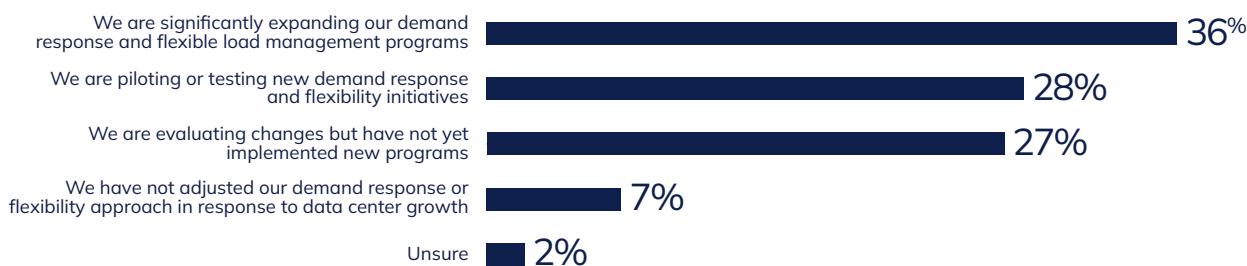
Flexible load management is already being reshaped by surging data center demand. Nearly two-thirds (64%) of respondents say data center growth is influencing how they approach flexible load today, accelerating initiatives that once lived on long-term planning roadmaps. Demand response and flexible load programs are moving from future concepts to near-term operational tools as power suppliers work to manage rising large-load pressure in real time.

This shift is unfolding amid mounting system-wide constraints. Respondents cited regulatory uncertainty (37%) and transmission congestion (36%) as obstacles that further complicate planning. As a result, power suppliers are increasingly looking to distributed flexibility as a way to unlock capacity, manage volatility, and adapt to demand growth that is arriving faster than new generation or transmission can be built.

At the same time, the data center boom is acting as a catalyst for change. While the strain on the grid is undeniable, many energy professionals see an opportunity to modernize how loads are planned and managed. More than one-third (35%) say data center growth is accelerating the need for flexible load management, while others point to broader investments in storage, modernization, and new operational models. Together, these responses reflect a sector under pressure, but one that is actively transitioning towards a more dynamic, flexibility-first approach to managing the grid in an era of unprecedented demand.



How is the rapid growth in data center energy demand impacting your organization's approach to flexible load management and demand response?



# Investing in Load Flexibility as Core Grid Infrastructure

Power suppliers are responding to rising demand by investing directly in load management and flexibility, expanding DR programs, strengthening customer-facing capabilities, and integrating flexibility tools alongside traditional infrastructure.

Load flexibility is now firmly embedded in day-to-day operations. A majority (86%) of respondents say that it is already critical to their business, reflecting a shift away from treating DR as a seasonal or emergency measure. Instead, flexible load is increasingly viewed as essential infrastructure, supporting forecasting, resource adequacy, economic dispatch, and reliability planning.

This shift is being backed by significant capital investment. Nearly two-thirds (63%) of energy professionals expect DR funding to grow by 50% or more over the next three years, signaling a broad recognition that managing future demand will require sustained investment in flexible load programs; not just new generation or transmission.

**86%**

of respondents say that flexible load management is already critical to their business



## What's Slowing Investment in Load Flexibility

As power suppliers ramp up investment in flexible load management, execution remains a challenge. While advanced technologies promise more responsive, data-driven programs, many organizations are still constrained by early-stage capabilities and limited systems for coordinated distributed assets and automating operations at scale.

Cost is the primary brake on progress. A strong majority of respondents (70%) cite technology and implementation expenses as the biggest barrier to scaling flexible load programs, while nearly half (48%) point to insufficient regulatory incentives that limit investment and slow adoption. Data integration challenges and limited internal expertise are also a barrier (according to 33% of respondents), further highlighting that scaling flexibility requires more than funding—it demands better integration, automation, and operational readiness.

Barriers extend beyond internal systems. When it comes to enrolling customers, organizations face a different set of hurdles:

**What is the biggest obstacle your organization faces in recruiting or enrolling new participants in demand response programs?**



# Where Flexible Load is Taking Hold

Despite these challenges, DR and flexible load programs are already underway across a wide range of energy-intensive sectors. This growing participation shows that flexible load management is gaining traction where operational flexibility and energy intensity intersect. That momentum is translating into investment, with nearly two-thirds of respondents expecting demand response funding to increase by 50% or more over the next three years.

Looking ahead, data centers stand out as the top priority for future enrollment (according to 63% of respondents), with power suppliers also targeting growth in EV charging (36%), advanced manufacturing (33%), and water and wastewater facilities (32%). Emerging sectors such as biotech labs, cryptocurrency operations, and residential aggregators are also expected to play a growing role in expanding grid flexibility.

## Top Growth Priorities for Grid Enrollment

**63%**

Data centers

**36%**

EV charging

**33%**

Advanced manufacturing

**32%**

Water & wastewater

## Embracing Data Centers as Grid Flexibility Partners

Power suppliers increasingly expect data centers to play an active role in supporting grid stability over the next five years. While they remain a major source of load growth and system strain, power suppliers are beginning to see data centers as potential flexibility assets rather than passive demand. Through new operational partnerships that combine technology, coordination, and shared accountability, data centers have the potential to become an integral part of a more resilient, adaptable grid.

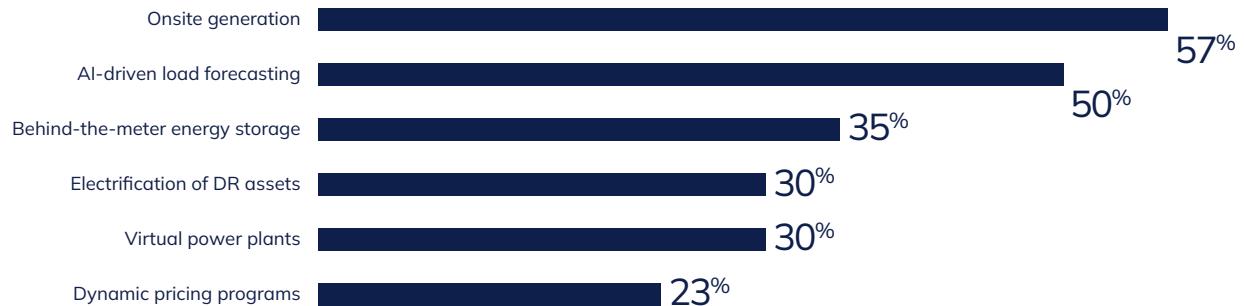
The findings point to a clear shift in how grid stability will be delivered in the years ahead. Power suppliers consistently identify onsite power generation as the most important data center capability for improving grid stability, followed closely by backup generation, onsite battery storage, UPS systems, and workload and compute flexibility. This emphasis reflects a broader move toward capabilities that allow large loads to respond dynamically to grid conditions. It also aligns with wider sentiment across the survey: 86% of respondents say load flexibility is already critical to their business, and most expect demand response and flexible load funding to grow substantially as these capabilities become central to reliability and operational planning.

Over the next five years, which data center capabilities will be the most important to improving grid stability?



# Why the Power Challenge Is Creating a Moment for Innovation

To support this transition, energy professionals are actively evaluating technologies that make flexibility operational at scale. When asked which technologies or strategies they want to explore to enhance grid flexibility, energy professionals highlighted the following priorities:



At the same time, the data center boom is accelerating innovation rather than simply exposing risk. More than one-third of respondents say data center growth is directly accelerating the need for flexible load management, while others point to increased investment in storage, grid modernization, and new operating models. Together, these signals suggest a sector under pressure but actively adapting through flexibility, technology, and new approaches to load management to meet the demands of a more volatile, high-intensity energy future.



# Looking Ahead: A More Flexible Energy Future

By 2030, flexible load management is expected to be central to the majority (89%) of power suppliers' energy strategies. In fact, 44% expect to be managing over half of their portfolios through flexible load programs, further reaffirming the operational significance of load management.

**What portion of your organization's total energy portfolio is your organization targeting to manage through flexible or controllable loads by 2030?**



At the same time, urgency is rising. Broad electricity demand is creating immediate strain on the grid and accelerating the need for flexible load management across the sector. Power suppliers cannot rely on gradual adaptation. They must act quickly to meet the demands of increasingly large and dynamic loads. While barriers such as cost, regulatory gaps, and integration challenges persist, delaying investment risks compounding operational pressures as energy demand continues to grow. Yet, despite persistent challenges, confidence remains steady: 82% of respondents are optimistic about the sector's ability to adapt to rising large-load demand.

To prepare for a future defined by high-intensity demand, organizations are signaling that a decisive shift toward flexible load strategies, enhanced demand response programs, and enabling technologies is becoming essential to protect reliability, manage volatility, and prepare the grid for a new era of high-intensity demand. The next phase of grid reliability will depend on how effectively the sector transforms flexibility from an aspiration into a core operational capability.

OBM is helping power suppliers implement the energy agility required to adapt. By delivering intelligent flexible load management, OBM enables organizations to respond dynamically to changing conditions and operate without sacrificing performance.

## ABOUT OBM

OBM is a leader in flexible load management solutions. We provide energy agility, operational simplicity and risk mitigation through our innovative compute management platform, comprehensive energy optimization technology, and broad energy partnerships. With a proven track record of managing loads up to 500 MW and integrating them into leading demand response programs nationwide, as well as mitigating operational and financial risk, OBM is transforming the landscape of compute-intensive operations.