



# Verrus Data Centers

The world's most flexible and sustainable data centers

GRID AWARE, CARBON AWARE, COMPUTE AWARE™

May 2026

# Infrastructure Redefined

Building an infrastructure ecosystem that serves the common good.

# Optimized for all stakeholders

From isolated consumption to an integrated ecosystem. Verrus is redefining what infrastructure can be.



## Customers

**Engineered for a new era.**

Reliable, high-density capacity optimized to squeeze more out of every watt.



## The Power Grid

**A dispatchable partner.**

Providing stability and capacity when the local energy system needs it most.



## Communities

**Sustainable growth.**

Smart, low-impact developments that bolster local economies and regional goals.

# The Verrus™ blueprint



## Ultra-low water consumption

Consumes significantly less water than legacy design data centers through closed-loop cooling and seasonal adiabatic spray misters.



## Advanced BESS Backup Power

Uses battery energy storage systems (BESS) rather than diesel generators for a safer, cleaner, quieter approach.



## Verrus PowerFlow™

Enables optimal use of available energy from the grid, helping tenants and utilities maximize revenue.



## Load Flexibility

Data centers utilize BESS flexibility to reduce power import during grid stress, decreasing the need for new generation and infrastructure investments while increasing system revenue, thus creating **downward pressure on electricity rates** for all customers.



## StabiliGrid™

Data center BESS acts as an automatic grid "**shock absorber**," **improving voltage event ride-through** via StabiliGrid™ architecture to help utilities stay more resilient and ensure reliable power for all.

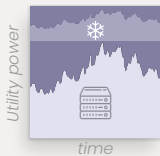


Rendering of a Verrus data center campus under development.

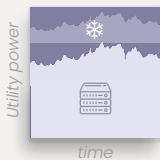
# Customers: How Verrus optimizes productivity

Engineering a data center from the ground up for maximum productive utilization per megawatt.

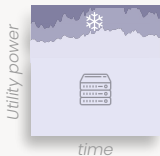
Regional  
Colo



Legacy  
Hyperscaler



Verrus Data  
Center with  
PowerFlow™



Up to 50+%  
increase

in productive utilization of  
interconnect



### PowerFlow™ Energy Management

MV Pooled power distribution design and sophisticated controls ensure every watt is precisely managed for server loads at all times.



### Cooling Optimization

Onsite thermal storage, adiabatic systems, and mechanical optimization reduces peak cooling demand, freeing IT capacity.



### Behind-the-Meter (BTM) Energy Storage

BESS for peak shaving and load shifting, freeing up stranded capacity and acting as a reliable grid buffer.

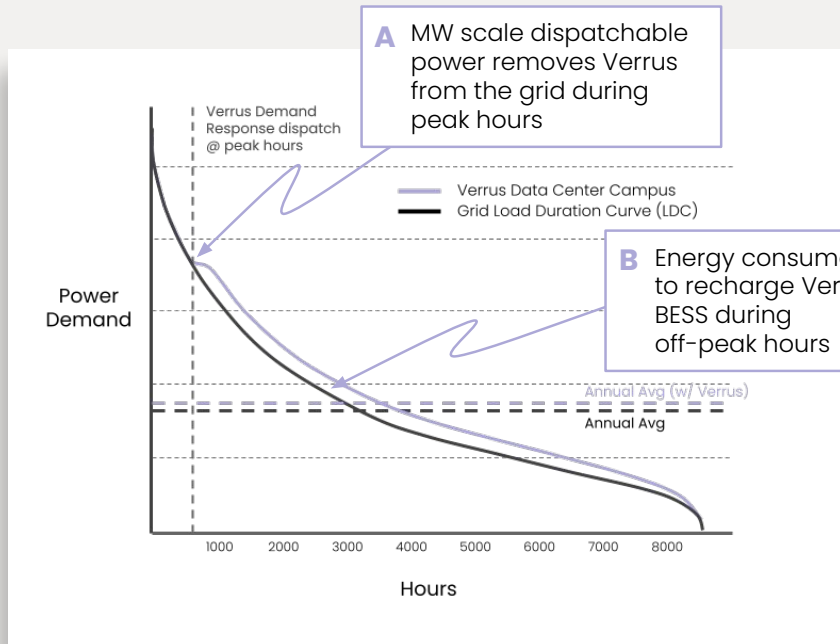


### Real-Time Data Transparency

Real-time facility data lets customers manage server deployments with confidence, helping to make use of all available headroom.

# Utilities: How Verrus helps the grid & its customers

Large load flexibility that can be dependably dispatched when the grid is stressed



Representative utility Load Duration Curve (LDC)

**A** By committing firm, dispatchable power during peak [n] hours of the year, a Verrus data center campus can be added to a utility demand curve without contributing toward net new required generation and minimizing infrastructure upgrades.

**B** Verrus data center campuses utilize megawatt-scale BESS as the sole dispatchable energy resource - which means they discharge during a utility event with **100% of required energy consumed during off-peak periods.**

➔ That translates to a higher system-level capacity factor and **higher utility returns + downward pressure on energy prices for ratepayers.**

# Utilities: How Verrus helps the grid & its customers

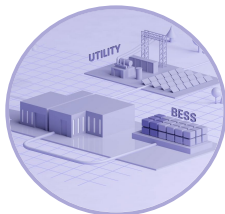
Transforming large data center loads into grid assets with **StabiliGrid™**



## The Challenge

### Case Study: July 2024 Dominion "Load Dump"

In July 2024, transmission faults caused by lightning strikes in Virginia triggered a "self-protection" cascade. Automated systems sensing minor fluctuations caused facilities to disconnect, leading to a 1.5 GW load dump. This forced utility operators to throttle plants to prevent blackouts, revealing how AI loads can threaten regional stability.



## The Solution

### StabiliGrid™ Architecture

StabiliGrid™ transforms data centers into active grid stewards. Instead of disconnecting during minor flickers, its logic evaluates grid recovery rates. By deploying facility BESS in "volt-watt" mode, it provides sub-second support, allowing data centers to ride-through disturbances while stabilizing the local grid.



## Rigorously Tested

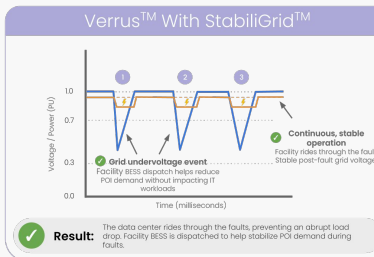
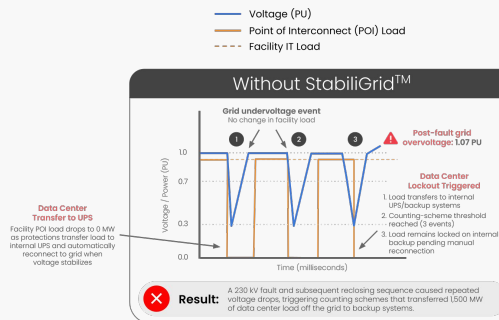
### Simulation Framework



Collaborated with the National Lab of the Rockies (NLR) to develop a controller hardware-in-the-loop (CHIL) simulation framework. These tests accounted for unique hyperscale dynamics, where AI workloads can ramp from 10% to 100% in 10ms, ensuring firm load restoration within 100ms of grid normalization.

## StabiliGrid™ in Action: Same Fault. Different Outcome.

Replicating July 2024 Virginia event: Cascaded undervoltage events, each <math>< 0.7 \text{ PU}</math>, within an 87 second window



# Communities: A positive-impact neighbor

Smart infrastructure that strengthens communities, creates local prosperity, and respects our natural resources.



## Ultra-low water consumption

Consumes significantly less water than legacy design data centers through closed-loop cooling and seasonal adiabatic spray misters.



## Near-zero local pollution

By replacing diesel generator with battery energy storage as primary backup power, we eliminate CO<sub>2</sub> and NO<sub>x</sub>/SO<sub>x</sub> emissions at the source.



## Quiet operations

Coupled with state-of-the-art quiet cooling fans, innovative BESS technology operates silently, removing the disruptive noise levels common with traditional generators.



## Community benefit

Skilled trades jobs during campus build out + permanent full time employment opportunities. Support local schools and township infrastructure, first responders with sizable property tax contributions.



## Stabilizes utility rates, strengthens grid

With its load flexibility, Verrus campuses reduce the need for expensive peaker plants, increase revenue for the existing grid, and help utilities keep energy rates lower for all local customers.



# Utilize Coalition Overview

**Utilize Coalition is a industry-led cross-partisan campaign to make electricity cheaper, faster to connect, and more reliable through *increased grid utilization*.**

We bring together a wide range of stakeholders – policymakers, utilities, consumer advocates, labor unions, environmental groups, researchers, etc. – to enact simple, tech-neutral policy to meaningfully incentivize grid utilization.

Founding Supporters



# Our thesis

The problem: our grid is only ~50% utilized nationally, meaning we're only using half of the capacity of the total system, on average, at any given time. Utilization has decreased in recent decades, making electricity more expensive. Distribution and transmission are the primary drivers of electricity rate increases, not generation.

The opportunity: load growth presents an historic opportunity to drive down costs by “selling more electrons over the grid we have.” Unlike most markets, electricity is largely based on fixed costs, so more demand can lower costs.

# The Untapped Grid:

How Better Utilization of the Power System Can Improve Energy Affordability

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MARCH 2026

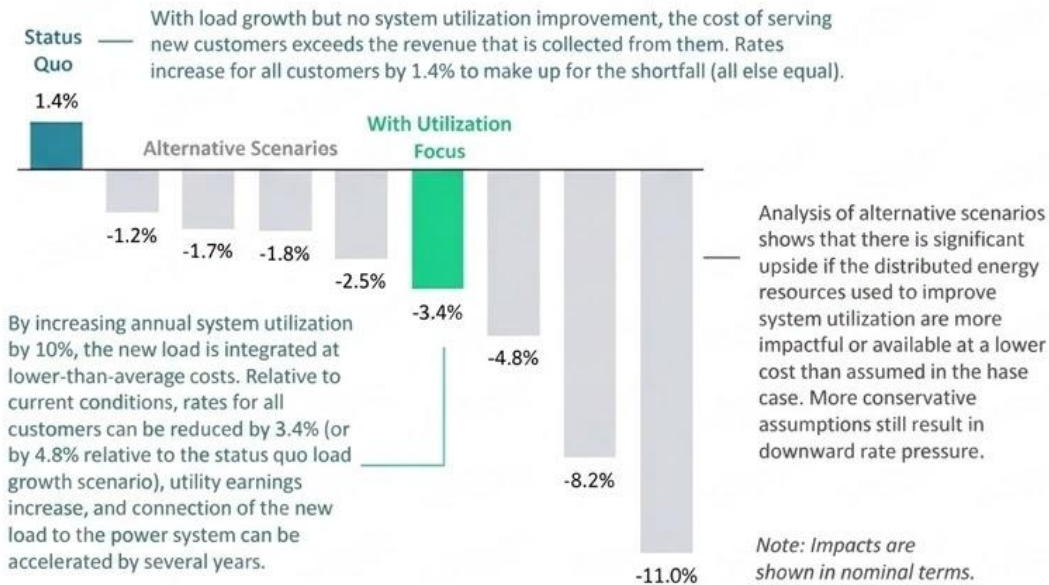


# The Impacts of Improved System Utilization: An Illustrative Example

In this illustrative analysis, improving system utilization can reduce customer bills and accelerate the connection of new load while still allowing utility earnings to grow relative to current levels, all else equal.

## All-in Average Rate Impact Due to Load Growth

For various characterizations of the power system



## INTERPRETING THE RESULTS

**Proof-of-concept.** The analysis is a plausible illustration of the benefits of improved system utilization; it is not a comprehensive analysis of all possible utility or market conditions. Tailored, jurisdiction-specific analysis is needed to understand the opportunities for any given system.

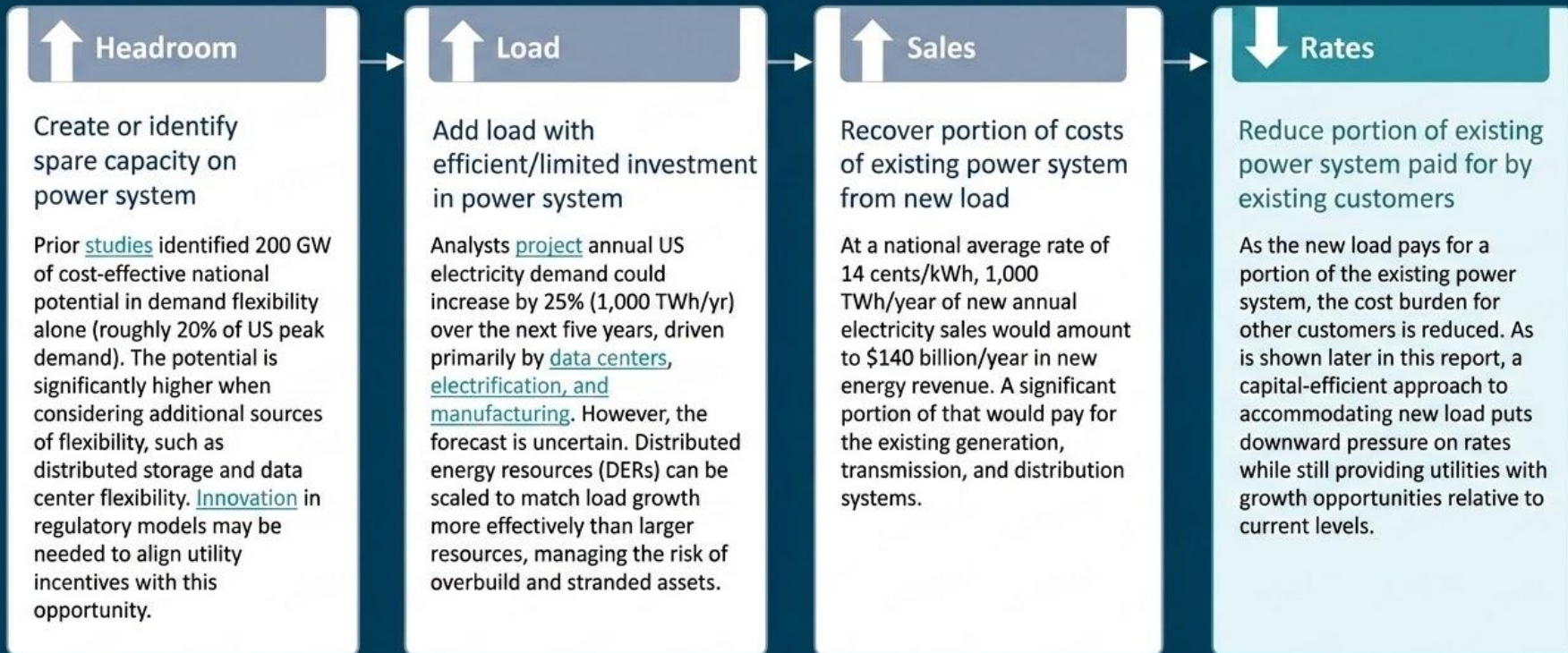
**Other rate impacts.** This study focuses only on the rate impacts associated with load growth and improved system utilization. It does not analyze [other factors](#) that could independently drive rate changes, such as the replacement of aging transmission and distribution (T&D) infrastructure or fluctuations in natural gas prices.

**Rate design.** The “status quo” analysis assumes existing rates are insufficient to fully recover incremental cost from new load. In practice, [rate design](#) can also be an effective tool for mitigating cost shifts from new loads to existing customers.

**Policy implications.** This paper quantifies the impact of increased system utilization but does not propose specific policies or programs in this area.

# Converting Utilization Improvements into Downward Rate Pressure

Improvements in system utilization enable capital-efficient load growth, which puts downward pressure on rates.

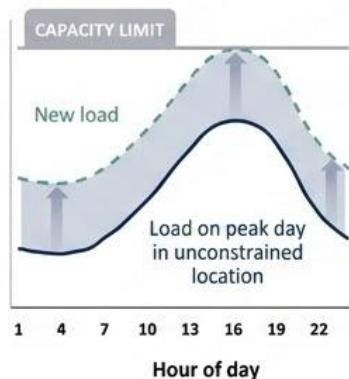


# The Three Ways to Improve System Utilization

System utilization can be improved by adding new load when and where there is spare capacity. System headroom can be created through flexibility, efficiency, and other cost-effective capacity solutions.

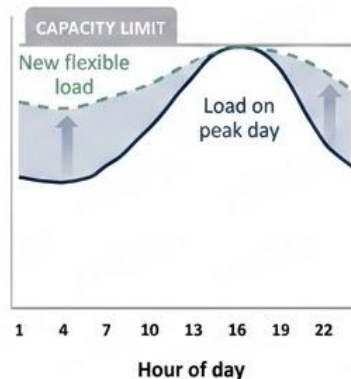
1

Add new load in **locations** where sufficient headroom already exists on the system.



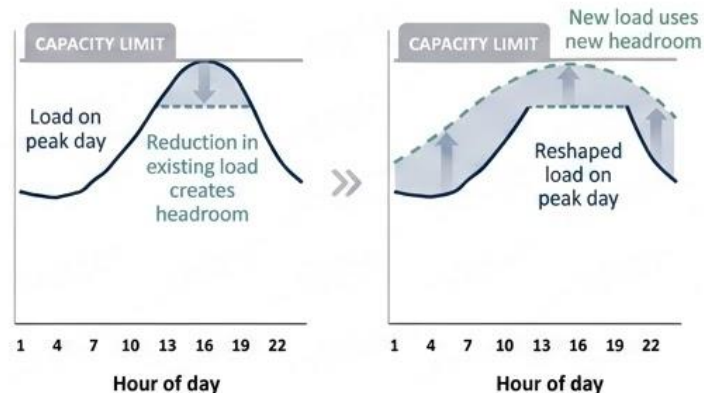
2

Add new load at **times** when there is spare capacity. This is possible if the new customers are flexible and/or can self-supply during peak conditions.



3

Incentivize technologies and behavioral changes that reduce peak demand of existing load. This creates new headroom on the system, which can then accommodate the addition of new load.



**Note:** These are highly simplified conceptual illustrations. The nuances of how improved system utilization would put downward pressure on rates are discussed in more detail throughout this report.

# National Implications

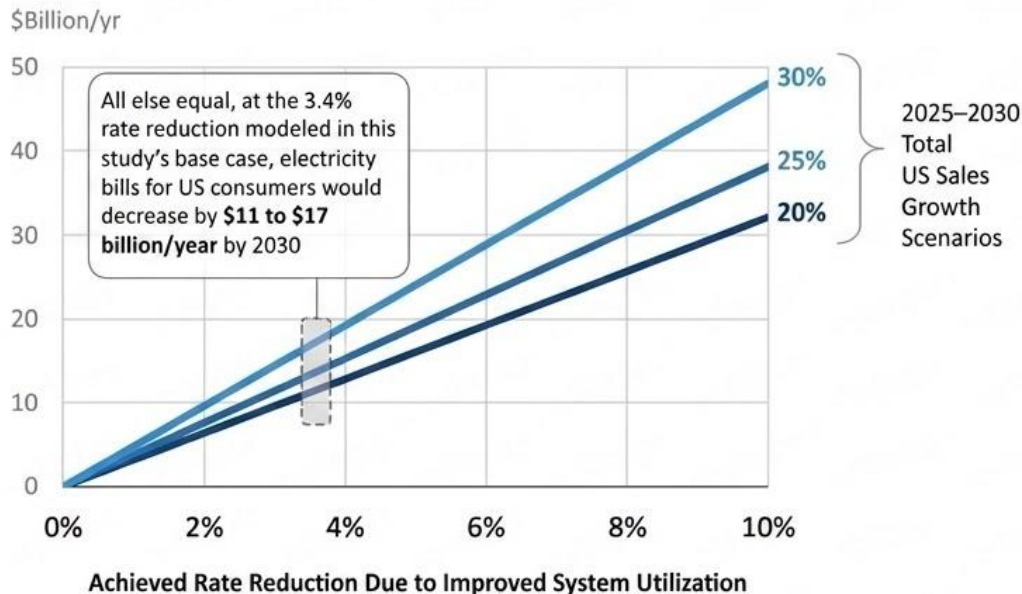
**At a national scale, consumers could save hundreds of billions of dollars over the next decade due to system utilization improvements.**

Extrapolating the findings of our illustrative utility analysis to the national level provides an indication of the total reduction in electricity bills that could be experienced by existing consumers due to improvements in system utilization.

Between 2025 and 2030, analysts [forecast](#) that annual electricity sales in the US could increase by between 20% and 30%. Scaling the results of our base-case analysis to that level of load growth suggests annual consumer electricity bill savings of \$11 billion to \$17 billion per year by 2030, all else equal. Over a 10-year period, the savings would amount to \$110 billion to \$170 billion.

If downward pressure on rates exceeds the finding in our base case (as shown in some alternative scenarios), the bill savings could be significantly higher, approaching \$500 billion over 10 years if a 10% rate reduction is achieved.

**Reduction in National Annual Electricity Bill Due to Improved System Utilization**  
For Range of Achieved Rate Reductions and Electricity Sales Growth, by 2030



Note: Values are shown in nominal terms.

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