The Economics of High Load Factor Customers: How AI Datacenters Can Reduce System-Wide Electricity Rates

Analysis prepared for electricity infrastructure policy discussions

Abstract

This paper examines the economic principles underlying electricity rate structures in jurisdictions where fixed infrastructure costs constitute a substantial portion of total system costs. We demonstrate that when high load factor customers—such as AI datacenters operating at 80-90% capacity utilization—connect to electrical systems with average load factors of approximately 55%, the fundamental economics suggest that rates for all customers should decline. This occurs through the mechanism of spreading fixed infrastructure costs over a larger volume of kilowatt-hours consumed. However, empirical evidence reveals a complex regulatory and rate design landscape where these theoretical benefits do not always materialize in practice. We analyze load factor data from U.S. utilities, review authoritative academic literature on fixed cost recovery in electricity markets, and identify the conditions under which high load factor additions benefit versus burden existing ratepayers. The paper concludes that rate design, cost allocation methodology, incremental infrastructure requirements, and regulatory policy choices determine whether datacenter load growth produces the economically predicted rate reductions.

1. Introduction

The rapid expansion of artificial intelligence computing has created unprecedented demand for datacenter capacity, with corresponding implications for electrical grid infrastructure. As utilities face requests for gigawatt-scale power commitments from hyperscale datacenters, a fundamental economic question emerges: under what conditions does adding large, high-utilization loads reduce or increase electricity rates for existing customers?

This question is particularly salient given that electricity rates in U.S. jurisdictions are predominantly volumetric—approximately 90-93% of residential revenue derives from usage-based charges despite roughly half of utility costs being fixed infrastructure investments.[1,2] When these fixed costs are recovered through per-kilowatt-hour charges, any customer whose consumption pattern allows better utilization of existing assets should theoretically reduce the average cost borne by all ratepayers.

This paper analyzes this proposition through three complementary lenses: (1) the fundamental economics of load factors and fixed cost recovery, (2) empirical data on actual load factors for grid systems versus datacenters, and (3) the regulatory and practical considerations that mediate between economic theory and observed outcomes.

2. Theoretical Framework: Load Factors and Fixed Cost Recovery

2.1 Definition and Significance of Load Factor

Load factor represents the ratio of average demand to peak demand over a specified time period, typically expressed as a percentage. Mathematically:

$$\text{Load Factor} = (\text{Average Demand} / \text{Peak Demand}) \times 100\%$$

Or equivalently, using common billing metrics:

$$\text{Load Factor} = \text{Total kWh} / (\text{Peak kW} \times \text{Hours in Period}) \times 100\%$$

Load factor measures utilization efficiency—how consistently energy is consumed relative to maximum demand. A load factor approaching 100% indicates nearly constant consumption, while lower values indicate "spiky" usage patterns with substantial idle capacity between peak events.[3,4]

2.2 Fixed Costs in Electricity Systems

Borenstein and Bushnell (2022) provide the authoritative academic treatment of fixed cost recovery in U.S. electricity markets.[1] Their analysis reveals that retail electricity prices typically exceed social marginal cost primarily due to the recovery of fixed infrastructure costs—including generation capacity, transmission networks, distribution systems, and customer service infrastructure—through volumetric pricing.

This rate design creates a critical economic dynamic: when fixed costs are embedded in per-kWh rates, any increase in total system throughput (kWh sold) without proportional increase in fixed costs necessarily reduces the fixed cost component per unit of energy. Borenstein et al. (2021) demonstrate this effect is particularly pronounced in California, where investor-owned utilities recover virtually all fixed costs through volumetric charges, resulting in residential rates 2-3 times higher than marginal cost.[2]

2.3 The Load Factor Premium

Electric utilities explicitly recognize the value of high load factor customers in rate design. Industry sources confirm that "electrical rates are designed so that customers with high load factor are charged less overall per kWh."[3] This preferential treatment reflects economic reality: high load factor customers impose lower per-unit costs on the system by:

- Utilizing existing infrastructure capacity more fully
- Contributing more revenue relative to their peak demand burden
- Providing more predictable loads that simplify system planning
- Requiring proportionally less standby capacity

The U.S. Department of Energy's foundational "Grid 2030" report explicitly noted that "the national average load factor is about 55%. This means that electric system assets, on average, are used about half the time."[5] This substantial underutilization creates the theoretical opportunity for efficiency gains through better load matching.

3. Empirical Data: System vs. Datacenter Load Factors

3.1 U.S. Grid System Load Factors

Multiple authoritative sources confirm the U.S. electricity system operates at approximately 55% load factor on average:

Source	Load Factor	Notes
U.S. DOE Grid 2030[5]	~55%	National average, system-wide
SDG&E System (2006)[6]	56%	Peak: 4,224 MW, Average: 2,384 MW
Typical Office Buildings[7]	45-55%	Representative commercial customer
Residential (Phoenix)[8]	33-34%	Residential customers typically lowest

This 55% system average reflects the combined effect of base-load generation (typically 70%+ capacity factors), intermediate generation, and peaking units (often below 15% capacity factors), along with daily and seasonal demand variations.[9]

3.2 AI Datacenter Load Factors

In stark contrast, datacenters—particularly those supporting AI workloads—operate at substantially higher load factors:

Source	Load Factor	Notes
Utility Industry Reports[10,11]	80-85%	Actual observed performance
Datacenter Planning[10,11]	90%	Design target for hyperscale facilities
PG&E Forecast Data[12]	~90%	Used for load forecasting through 2045
California Silicon Valley Power[13]	79%	Conservative estimate for planning
EnergyCAP Case Study[4]	~90%	Measured datacenter performance

These load factors reflect the operational reality of datacenters: servers, cooling systems, backup power, and network equipment operate nearly continuously, 24 hours per day, with minimal variation based on time or season.[14] AI training workloads, in particular, maintain sustained high utilization as they process enormous datasets over extended periods.[15]

> **Key Finding:** The differential between system average load factor (~55%) and datacenter load factor (80-90%) represents a 45-64% improvement in infrastructure utilization efficiency. This substantial gap creates the theoretical foundation for system-wide economic benefits.

3.3 Quantitative Example

Consider a utility system with the following characteristics:

- $1 billion in fixed annual costs (infrastructure, operations, customer service)
- 10,000 GWh annual sales (system at 55% load factor)
- Fixed costs embedded at $0.10/kWh in volumetric rates

Now add a 1,000 MW datacenter at 90% load factor:

- Additional annual consumption: 1,000 MW × 8,760 hours × 0.90 = 7,884 GWh
- New total sales: 17,884 GWh
- New fixed cost per kWh: $1 billion / 17,884 GWh = $0.056/kWh

Result: Fixed cost component reduced by 44%, from $0.10/kWh to $0.056/kWh, assuming no incremental fixed costs to serve the datacenter.

This simplified example illustrates the fundamental economic mechanism. However, as we examine in Section 4, the critical assumption—"no incremental fixed costs"—often fails to hold in practice, fundamentally altering the outcome.

4. Why Theory and Practice Diverge: The Rate Design Challenge

4.1 The Incremental Cost Problem

Borenstein (2025), in his authoritative analysis "What Will Data Centers Do To Your Electric Bill?", identifies the central tension: "It's clear that rapid data center demand growth can drive up retail rates for other customers, particularly in the near term. But it is also clear that this can be an opportunity to spread the fixed costs over more sales... The key to making new data center electricity demand a benefit to other customers is to create incentives for these new loads to restrain their peak demand and to avoid discount pricing so the new loads significantly contribute to covering system fixed costs."[16]

The theoretical rate reduction assumes existing excess capacity. However, datacenters often require:

- Transmission system upgrades to deliver gigawatt-scale loads
- New substation construction ($3-7 million typical cost)[11]
- Distribution infrastructure reinforcement
- In some cases, new generation capacity or power purchase agreements

Recent research from PBS NewsHour notes that while utilities can benefit from datacenter load "if they can do that without needing to make big additional investments in infrastructure because they already have capacity on their system," the reality is often more complex, with significant infrastructure costs required.[17]

4.2 Cost Allocation and Rate Class Assignment

Even when system-wide costs decline on a per-unit basis, regulatory cost allocation methodologies may prevent these benefits from flowing to existing customers. Peskoe and Martin (2025) from Harvard Law School document that "many data centers do not pay those prices" set through public rate cases. "They sign contracts with a utility that provides a special deal, and typically, those contracts are confidential to the public."[18]

This opacity creates a fundamental accountability problem: if datacenters receive discounted rates through special contracts, they may not contribute proportionally to fixed cost recovery, effectively shifting costs to other customer classes despite their theoretical efficiency advantages.

4.3 Empirical Evidence of Rate Impacts

Empirical data reveals mixed outcomes. Bloomberg (2025) reports that "in Portland's Hillsboro suburb where 15 major data centers are located... over the past decade, residential rates climbed by 8 cents per kilowatt-hour, compared with just 2 cents for large users."[19] This pattern —residential rates increasing while large customer rates remain flat or decline—suggests cost-shifting rather than system-wide benefit realization.

Conversely, in regions with genuine excess capacity and transparent rate design, the theoretical benefits can materialize. The key differentiator appears to be whether regulators require datacenters to pay rates that reflect their full cost of service, including incremental infrastructure, rather than receiving preferential treatment that externalizes costs to other ratepayers.

4.4 The Timing Dimension

Infrastructure must be built in advance of datacenter operation, creating a timing mismatch. Utilities must invest in transmission and generation capacity based on projected datacenter demand, but if that demand fails to materialize—or if the datacenter closes after several years—ratepayers are left with stranded costs.[16] This risk is particularly acute in the rapidly evolving AI sector, where business models and computing architectures change quickly.

5. Real-World Solutions: Recent U.S. Regulatory Innovations

The theoretical framework outlined above is now being tested in practice through several landmark deals and regulatory actions across the United States. These cases provide critical lessons about protecting ratepayer affordability while enabling datacenter development.

5.1 Georgia PSC: Mandatory Incremental Cost Recovery

In January 2025, the Georgia Public Service Commission unanimously approved groundbreaking rules that represent perhaps the strongest ratepayer protection framework in the nation.[31,32,33] The Georgia model establishes that:

- **Threshold Trigger:** Any new customer using more than 100 megawatts must be billed under special terms beyond standard customer rates
- **Progressive Cost Recovery:** Datacenters must pay transmission and distribution costs as construction progresses, not after the fact
- **Upstream Infrastructure Costs:** Large customers bear full costs for generation, transmission, and distribution infrastructure required to serve them
- **Contract Length Requirements:** Extended contract terms (up to 15 years, versus typical 5-year contracts) ensure cost recovery even if projects shut down early
- **Regulatory Oversight:** All contracts with customers exceeding 100 MW must be submitted to the PSC for review within 30 days
- **Minimum Billing Requirements:** Large customers face minimum bills even if electricity usage fluctuates, preventing cost-shifting to other ratepayers

PSC Chairman Jason Shaw emphasized the stakes: "The amount of energy these new industries consume is staggering. By approving this new rule, the PSC is helping ensure that existing Georgia Power customers will be spared additional costs associated with adding these large-load customers to the grid."[32]

The Georgia approach directly addresses the stranded cost problem identified in Section 4. If a datacenter fails to materialize or closes prematurely, the 15-year contract and minimum billing requirements ensure ratepayers don't absorb unrecovered infrastructure investments.[33,34]

5.2 We Energies-Microsoft: First-of-Its-Kind Wisconsin Tariff

We Energies' proposed tariff for Microsoft's $3.3-7.3 billion Mount Pleasant datacenter campus represents a collaborative approach developed jointly with the hyperscaler.[35,36,37] Key provisions include:

- **Very Large Customer (VLC) Rate Class:** Customers with loads exceeding 500 MW receive specialized rate treatment designed to isolate datacenter costs from general ratepayers
- **Administrative Cost Recovery:** Fixed charge of $213,118 per billing period plus $305 per MW of maximum demand to cover dedicated personnel and overhead
- **Resource Agreement Terms:** Contracts effective for the depreciable life of generation assets (20+ years for wind/solar), protecting against premature abandonment
- **Pre-Payment Structure:** Microsoft pre-pays for energy and electrical infrastructure to offset costs for ratepayers
- **Renewable Energy Matching:** Microsoft commits to match kilowatt-hours used from fossil fuels with renewable energy purchases

Microsoft Vice President Bobby Hollis framed the arrangement as corporate responsibility: "As we continue to develop a $3.3 billion data center campus in Mount Pleasant, the draft tariffs submitted to the Public Service Commission will ensure we are protecting other ratepayers, paying our own way, and ensuring energy needs are met throughout the state."[35]

Tom Content, executive director of Wisconsin's Citizens Utility Board, praised the approach while noting timing concerns: "These are incredibly wealthy companies that can certainly afford to pay their own way for the changes that they're asking for in our energy system."[38]

However, the Wisconsin case also reveals implementation challenges. We Energies sought approval for $9 billion in new natural gas infrastructure before finalizing the special rate structure, raising concerns that ratepayers could be left with stranded fossil fuel assets if Microsoft's plans change—a pattern that mirrors concerns following the failed Foxconn project at the same Mount Pleasant site.[37,39]

5.3 Meta-Entergy: Largest Private Investment in Louisiana History

Meta's $10 billion AI datacenter in Richland Parish, Louisiana—the company's largest facility globally—represents a different model where the utility took the lead in economic development.[40,41,42] The Entergy deal includes:

- **Dedicated Generation:** Three new gas-fired power plants totaling 2.26 GW, with two units online by 2028 and a third by late 2029
- **Meta-Funded Substation:** The 55-acre Smalling Substation entirely funded by Meta (estimated hundreds of millions of dollars)

- **15-Year Revenue Guarantee:** Meta pays full annual revenue for the plants for 15 years, providing revenue certainty for infrastructure investment
- **Renewable Energy Commitment:** Meta pledges to match electricity use with 100% clean and renewable energy through at least 1,500 MW of new renewables via Entergy's "Geaux Zero" program
- **Community Support:** Up to $1 million annually to Entergy's "The Power to Care" low-income ratepayer support program (matched by Entergy)

Entergy CEO Drew Marsh told Fortune that Meta will become Entergy's largest customer, consuming 2 GW of power running 24/7—"if you do the math," a massive baseload commitment.[41] The Louisiana Public Service Commission approved the arrangement 4-1 in August 2024.[42]

However, environmental groups challenged the approval process, arguing Entergy circumvented proper procedures for proposing gas-fired plants that could burden ratepayers.[43] Critics note that while Meta's 15-year commitment provides near-term revenue certainty, gas plants typically operate 30+ years, potentially leaving ratepayers with stranded costs after the contract expires.[43] Additionally, ratepayers will fund a $550 million transmission line to the datacenter site.[43]

> **Critical Pattern:** All three cases demonstrate that protecting ratepayer affordability requires *explicit regulatory action*—the market will not spontaneously produce fair cost allocation. Georgia's mandatory approach, Wisconsin's collaborative tariff development, and Louisiana's utility-led economic development each attempt to prevent cost-shifting, but with varying degrees of ratepayer protection and transparency.

6. EPRI's DCFlex Initiative: Transforming Datacenters into Grid Assets

While the regulatory cases above focus on cost allocation for new infrastructure, the Electric Power Research Institute's Data Center Flexible Load Initiative (DCFlex) represents a parallel strategy: reducing peak demand and increasing utilization of existing infrastructure through operational flexibility.[44,45,46]

6.1 The DCFlex Vision

Launched in October 2024, DCFlex brings together nearly 45 organizations—including hyperscalers (Google, Meta, Microsoft, Oracle, NVIDIA), utilities (Duke Energy, PG&E, Southern Company, Constellation), grid operators (ERCOT, PJM, RTE France), and datacenter developers (Compass Datacenters, QTS)—to demonstrate how datacenters can support rather than merely burden the grid.[44,45]

EPRI President and CEO Arshad Mansoor articulated the initiative's premise: "Flexible data center design and operation is a key strategy for accelerating AI development and realizing its benefits while minimizing costs, lowering carbon emissions, and enhancing system reliability."[46]

The core insight: while datacenters typically operate at 80-90% load factors (Section 3), they possess significant latent flexibility that can be activated during grid stress events without compromising their core mission. As Constellation CEO Joe Dominguez observed: "Our energy system is built to handle the extreme demands of our hottest summer days and coldest winter nights but is often underutilized. The real challenge isn't a lack of energy for data centers but managing the peak demand hours. The ability of data centers to flex during these critical periods is crucial."[46]

6.2 Demonstration Projects and Technologies

DCFlex established 5-10 "flexibility hubs" in 2025 to test practical implementations across three use cases:[47,48,49]

1. Computational Flexibility (Lenoir, NC and Phoenix, AZ)

- Partners: Google, Duke Energy, Oracle
- Technology: Workload choreography and scheduling to shift non-time-critical AI training during peak grid events
- Early Results: Phoenix site achieved 10-40% flexibility in choreographed workloads during simulated peak events[47]
- Next Phase: Responding to real (not simulated) peak energy events

2. Power Quality and Resilience (Paris, France)

- Partners: Data4, Schneider Electric, RTE (French transmission operator)
- Technology: Leveraging existing uninterruptible power supply (UPS) systems to power through voltage/frequency disruptions
- Goal: Demonstrate how datacenter backup systems can stabilize grid during disturbances rather than merely protecting internal operations

3. Behind-the-Meter Generation and Storage

- Exploring how datacenter on-site solar, batteries, and backup generators can serve dual purposes: business continuity and grid support
- Testing integration protocols and communication standards between datacenter operators and grid operators

6.3 Economic Benefits of DCFlex Approach

Tom Wilson, EPRI's principal technical executive, explained the business case for hyperscalers: "Electricity is a small percentage of [datacenters'] cost... so the idea of pausing their training to save pennies doesn't make sense, but the idea of pausing their training for a few hours a year in order to be connected and have a bigger training set does make sense."[50]

The flexibility value proposition includes:

- **Faster Grid Interconnection:** Datacenters willing to provide flexibility can connect sooner because they reduce peak infrastructure requirements
- **Reduced Infrastructure Investment:** If datacenters curtail during system peaks, utilities can defer or avoid building new peaking capacity
- **Better Asset Utilization:** Operating at high baseload (80-90%) while providing occasional peak relief optimizes both datacenter economics and grid efficiency
- **Renewable Integration:** Flexible loads can absorb variable renewable generation, reducing curtailment and improving clean energy economics

David Porter, EPRI's Vice President for Electrification & Sustainable Energy Strategy, noted the paradigm shift: "Having the ability to have large, flexible loads to improve the overall operation of the grid is key. We believe that data centers can be that large, flexible point load. Not all the time, not for an entire year, but in times when the grid really needs some assistance to meet the loads."[51]

6.4 Connection to Load Factor Economics

DCFlex directly addresses the utilization thesis presented in this paper's Sections 2-3. By enabling datacenters to maintain their 80-90% average load factor while providing strategic flexibility during the ~50-100 hours per year when grids face stress, the initiative creates a "best of both worlds" outcome:

1. **Preserve High Utilization:** Datacenters continue spreading fixed costs over maximum kWh (the Section 3 benefit)
2. **Reduce Peak Requirements:** Strategic curtailment during grid peaks means less need for expensive incremental infrastructure
3. **Capture Flexibility Value:** Datacenters can be compensated for providing grid services, creating new revenue streams

This combination potentially resolves the tension identified in Section 4: if datacenters can connect without requiring proportional peak infrastructure investments, the theoretical rate reduction from improved utilization can materialize without the offsetting cost burden from incremental capacity additions.

7. Policy Synthesis: Conditions for Beneficial Outcomes

Synthesizing the economic theory (Sections 2-3), empirical evidence (Section 4), regulatory innovations (Section 5), and flexibility solutions (Section 6), we can now specify precise conditions under which high load factor datacenter additions reduce system-wide rates:

7.1 Regulatory Requirements (Lessons from Georgia, Wisconsin, Louisiana)

1. **Incremental Cost Recovery:** Datacenters must pay for transmission, distribution, and generation infrastructure required to serve them (Georgia PSC model)
2. **Long-Term Commitments:** Contract terms matching infrastructure depreciation life (15+ years) with minimum billing requirements protect against stranded costs
3. **Transparent Oversight:** Large customer contracts require public utility commission review, not confidential special deals
4. **Progressive Payment Structures:** Datacenters pay infrastructure costs as construction progresses, not after completion
5. **Community Benefit Provisions:** Contributions to low-income ratepayer assistance programs or local infrastructure (Louisiana model)

7.2 Operational Requirements (DCFlex Framework)

1. **Demand Flexibility:** Capability to curtail 10-40% of load during 50-100 hours of annual peak events
2. **Grid Communication Standards:** Protocols enabling real-time coordination between datacenter operators and grid operators
3. **Workload Choreography:** AI training and other deferrable computations scheduled around grid constraints
4. **Behind-the-Meter Resources:** On-site generation and storage available for grid support,

not just business continuity
5. **Renewable Energy Matching:** Commitments to add new clean energy to the grid proportional to datacenter consumption

7.3 Market Design Requirements

1. **Flexibility Compensation:** Market mechanisms that appropriately value demand response from large flexible loads
2. **Separate Rate Classes:** Tariffs reflecting datacenter cost-of-service characteristics while ensuring fixed cost contribution
3. **Graduated Load Factor Incentives:** Rate structures that explicitly reward >75% load factors while penalizing low utilization
4. **Interconnection Reforms:** Faster queue processing for flexible loads willing to accept operational constraints

> **Synthesis:** The theoretical rate reduction from high load factor customers materializes *only when* (1) incremental infrastructure costs are recovered from the large customer causing them (regulatory requirement), (2) operational flexibility reduces peak capacity needs (DCFlex approach), and (3) rate design prevents preferential treatment that shifts costs to other ratepayers (market design). All three conditions must hold simultaneously.

8. Conclusions

The fundamental economics remain clear: when high load factor customers (80-90%) join electrical systems operating at average load factors (~55%), and when fixed infrastructure costs are recovered through volumetric pricing, the mathematical result should be lower per-unit costs for all customers. This is arithmetic, not theory—spreading fixed costs over more kilowatt-hours necessarily reduces the cost per kilowatt-hour.

However, 2024-2025 real-world experience demonstrates that this theoretical benefit materializes *only when explicit regulatory and operational frameworks ensure proper cost allocation and grid integration*. Three critical developments are shaping outcomes:

8.1 Regulatory Innovations Protect Ratepayers

Georgia's PSC rules, Wisconsin's collaborative tariff development with Microsoft and We Energies, and Louisiana's Meta-Entergy deal represent different approaches to the same challenge: preventing cost-shifting while enabling economic development. Georgia's mandatory incremental cost recovery model appears strongest, requiring datacenters to pay transmission/distribution costs as construction progresses, with 15-year contracts and minimum billing requirements protecting against stranded costs.[31-34]

These cases confirm that market forces alone will not produce fair cost allocation—active regulatory intervention is essential. The contrast between jurisdictions with explicit ratepayer protections (Georgia) and those with more opaque contractual arrangements (portions of the Louisiana deal) demonstrates the importance of transparent public utility commission oversight.

8.2 EPRI's DCFlex Initiative Enables Practical Flexibility

The DCFlex collaboration among 45+ organizations, including all major hyperscalers, utilities, and grid operators, represents a paradigm shift from viewing datacenters as inflexible loads to recognizing their potential as grid assets.[44-51] Early demonstrations show 10-40% flexibility is achievable during peak events without compromising AI training objectives. This operational flexibility directly addresses the incremental cost problem: if datacenters can curtail during system peaks, utilities need less additional peaking capacity, reducing the infrastructure burden that would otherwise offset utilization benefits.

The DCFlex approach transforms the economic equation. Instead of debating whether an 80% load factor customer at system peaks requires proportional capacity additions (which would negate rate benefits), DCFlex enables datacenters to maintain 80-90% average utilization while providing strategic demand response during the critical 50-100 hours annually when grids face stress.

8.3 Integration is Key to Affordability

The path forward requires integrating lessons from both regulatory innovations and operational flexibility:

1. **Cost Causation Principle:** Follow Georgia's model—datacenters pay for infrastructure they cause, with long-term commitments and minimum billing requirements preventing cost-shifting
2. **Flexibility Requirements:** Adopt DCFlex protocols requiring demonstrated demand response capability as a condition of interconnection, reducing peak infrastructure needs
3. **Transparent Oversight:** Require public utility commission review of all large customer contracts, not confidential special deals
4. **Renewable Integration:** Mandate that datacenter load growth be matched with new clean energy additions (Louisiana's Geaux Zero model), not just existing renewable energy certificates
5. **Community Benefits:** Include ratepayer assistance provisions in large customer agreements, recognizing that even well-designed rates may have distributional impacts

> **Final Synthesis:** The economic theory is sound—high load factor customers *can* reduce rates for all. Georgia PSC rules show how regulation *can* ensure fair cost allocation. EPRI's DCFlex initiative demonstrates how operational practices *can* reduce incremental infrastructure needs. But these benefits materialize only through deliberate policy choices, not market spontaneity. The question facing regulators is not *if* AI datacenter growth impacts rates, but *how*—and that depends entirely on the regulatory and operational frameworks they establish today.

For policymakers and regulators evaluating gigawatt-scale datacenter proposals, the evidence base is now substantial. The Georgia model provides a template for ratepayer protection. The DCFlex initiative offers a pathway to operational flexibility. The Meta-Entergy and Microsoft-We Energies deals illustrate both opportunities and risks in different contracting approaches.

The choice is clear: implement comprehensive frameworks combining incremental cost recovery (Georgia-style regulation), operational flexibility requirements (DCFlex protocols), and transparent oversight—or accept that datacenter load growth will likely increase rates for existing customers despite improved system utilization. The tools exist. The question is whether regulators will use them.

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