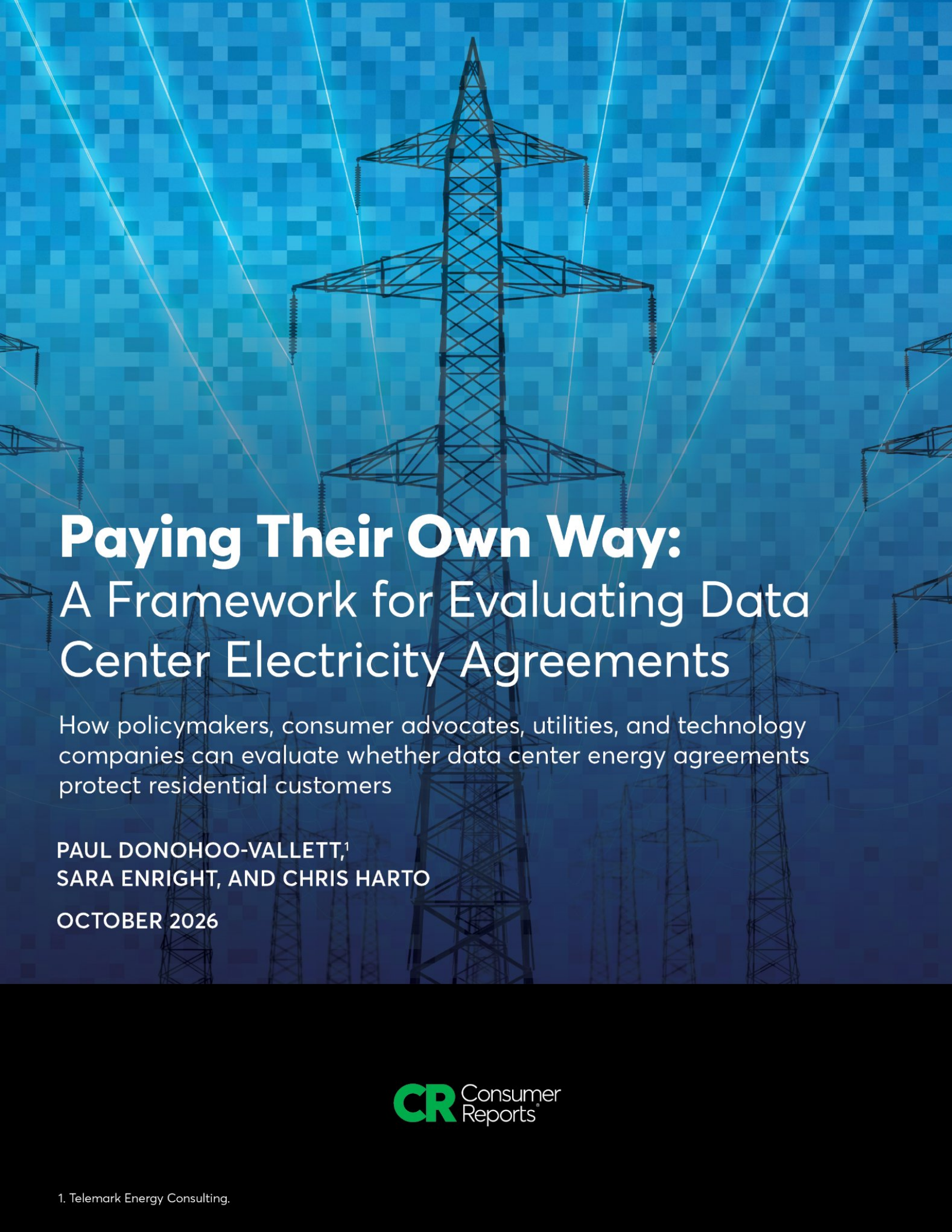




Paying Their Own Way: A Framework for Evaluating Data Center Electricity Agreements

How policymakers, consumer advocates, utilities, and technology companies can evaluate whether data center energy agreements protect residential customers

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1. Telemark Energy Consulting.

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Executive Summary

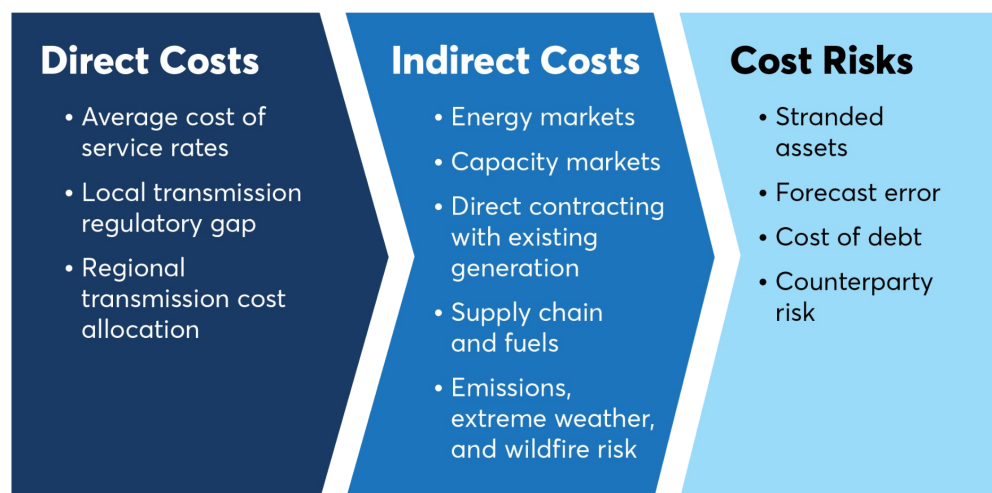
The rapid expansion of artificial intelligence (AI) is driving the largest increase in U.S. electricity demand in decades. Utilities are planning billions of dollars in new generation, transmission, and other infrastructure to serve large data centers. Whether that buildout raises or lowers costs for existing customers will depend on how projects are planned, financed, operated, and regulated—and who is required to bear the resulting costs and risks.

There is broad, bipartisan agreement on a basic principle: Data centers should pay their own way. The Trump administration has encouraged major developers to sign a Ratepayer Protection Pledge. Amazon, Google, Meta, Microsoft, OpenAI, Oracle, and xAI have made voluntary commitments not to pass the costs of their electricity use on to other grid users.¹

Those commitments matter, but they are not enough. There is yet no commonly accepted method for determining whether a project actually pays the full costs it creates. A recent Consumer Reports survey underscores the credibility gap: Only 4 percent of Americans are “very confident” that these companies will follow through on their commitments to protect consumers.²

For Consumer Reports, “paying their own way” means that data center customers—not households or other existing customers—bear the *full incremental costs and financial risks* associated with serving their facilities. That includes more than the price of the electricity they consume or the infrastructure that connects them to the grid. It also includes costs imposed through generation and transmission expansion, wholesale energy and capacity markets, equipment and fuel supply chains, utility financing, and risks associated with infrastructure that could become underutilized or stranded if projected demand does not materialize or disappears before the infrastructure is fully paid for.

Data Center Cost-Impacting Mechanisms



¹“Fact sheet: President Donald J. Trump advances energy affordability with the Ratepayer Protection Pledge,” *The White House*, March 4, 2026, <https://www.whitehouse.gov/fact-sheets/2026/03/fact-sheet-president-donald-j-trump-advances-energy-affordability-with-the-ratepayer-protection-pledge>.

²Consumer Reports nationally representative American Experiences Survey of 2,082 U.S. adults, May 2026, https://article.images.consumerreports.org/image/upload/v1780325596/survey/Consumer_Reports_AES_May_2026.pdf.

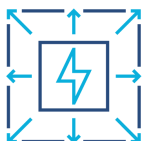
This report identifies and organizes a dozen direct, indirect, and risk-based pathways through which rapid data center growth can raise electricity costs for residential customers. Understanding these cost-impacting mechanisms is the first step toward understanding if projects are paying their own way.

The report then goes further to offer a practical framework for evaluating whether an individual project has adequately addressed all cost impacts. It focuses on six evaluation dimensions: power generation, transmission infrastructure, stranded asset protections, flexibility and grid integration, clean energy, and community benefits. For each of the six dimensions, CR's framework identifies questions stakeholders should ask and provides illustrative case studies. It is designed to help public utility commissions, legislators, consumer advocates, grid operators, utilities, developers, and communities move from broad promises to evidence-based evaluation.

What Data Center Projects Paying Their Own Way Look Like



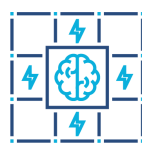
Power Generation: Data center customers cover the full cost of dependable energy and capacity to serve their demand, without increasing costs or reducing reliability for existing customers. Projects should also make efficient use of existing resources and strengthen the broader power system.



Transmission Infrastructure: Data centers pay for the local and regional grid upgrades they trigger, while maximizing available capacity through efficient siting and support for advanced grid technologies.



Stranded Asset Protections: Binding contracts protect other customers if a project is delayed, is downsized, relocates, or closes. Financial commitments and credit support should match the scale and useful life of the investments made on the project's behalf.



Flexibility and Grid Integration: Data centers provide dependable demand flexibility that utilities can plan around—including reducing consumption during grid emergencies before residential service is disrupted.



Clean Energy: Data centers procure new, regionally located clean energy that closely matches the amount and timing of their electricity demand, while supporting technologies that expand future clean-energy options that lock in long-term savings.



Community Benefits: Host communities help shape legally enforceable agreements that provide recurring benefits proportionate to the project's size and local impacts. Benefits complement strong electricity affordability protections.

AI-driven data center growth will require extraordinary investment in the power system. The question is not simply whether data centers are built, but whether the rules governing them protect the public.

At a minimum, projects should leave existing customers unharmed. The higher standard, and the opportunity, is to leave them better off. Well-structured projects can improve use of existing infrastructure, strengthen reliability and resilience, accelerate valuable new technologies, support host communities, and reduce long-term cost pressures.

Most of the country is not yet on a path to achieve that outcome. Getting there will require enforceable protections, meaningful transparency, and sustained action by policymakers, utilities, consumer advocates, technology companies, and communities.

1. Introduction

The rapid expansion of artificial intelligence is driving the largest increase in U.S. electricity demand in decades. Across the country, utilities are planning billions of dollars in new investments in generation and transmission infrastructure to serve a new era of large data centers.

Nearly every stakeholder involved in this transition agrees on the basic principle that data centers should “pay their own way.” Major technology companies have made public, voluntary commitments to covering the costs associated with their electricity demand, and lawmakers across the political spectrum have emphasized that residential customers should not subsidize this growth.

Despite broad agreement on that principle, there is no common framework for determining whether an individual data center project actually delivers on that promise.

Most public discussions focus on whether a project pays for the infrastructure directly needed to connect to the electric grid. While these direct costs are critically important, they represent only part of the picture. Large data center development can also affect electricity prices through wholesale energy markets, capacity markets, transmission planning, equipment supply chains, fuel markets, financing costs, and long-term risks associated with forecasting errors or stranded infrastructure. These indirect pathways are often difficult to identify, are spread across multiple regulatory proceedings, and may not become apparent until years after a project is approved.

This paper seeks to bridge the gap between broad commitments to protect ratepayers and the practical tools needed to evaluate whether individual data center agreements actually achieve that goal. It identifies the principal mechanisms through which data center development can increase electricity costs for residential customers—both directly and indirectly—and proposes an initial evaluation framework that stakeholders can use to assess whether proposed projects adequately address those risks.

1.1 Context

After more than a decade of relatively stable electricity prices, residential rates have risen sharply since 2020 due to inflation, fuel costs, natural disasters, supply chain disruptions, and aging infrastructure.³ The rapid expansion of AI data centers is also pushing rates higher by adding a significant source of future electricity demand. Recent projections from Lawrence Berkeley National Laboratory (LBNL) estimate that data centers could account for nearly 12 percent of total U.S. electricity consumption by 2030, more than doubling their share of 4.7 percent in 2024.⁴

This unprecedented demand has intensified concern among policymakers and stakeholders that residential customers could end up subsidizing the infrastructure required to serve new data centers, particularly in regions where projected data center demand exceeds the existing capacity of the power system. In a November 2025 nationally representative Consumer Reports survey, 78 percent of

³Donohoo-Vallett, P.; King, B.; Kolus, H.; and van Brummen, A., (2026, April 21). “Caught in the current: Historical and prospective drivers of changes in US electricity prices,” *Rhodium Group*, April 21, 2026, <https://rhg.com/research/us-electricity-prices-drivers>.

⁴Smith, S.J. et al., “United States data center energy usage report: 2025 update” (LBNL-2001758), *Lawrence Berkeley National Laboratory*, 2026, <https://doi.org/10.71468/P1RP4F>.

respondents were at least somewhat concerned that new data centers could increase their household energy bills.⁵

There is growing bipartisan agreement that residential and other customers should at minimum not subsidize data center growth, and aspirationally should benefit from system investment. The issue has received attention from the White House, with the Trump administration encouraging major data center developers to sign on to a Ratepayer Protection Pledge.⁶ Major data center developers, including Amazon, Google, Meta, Microsoft, OpenAI, Oracle, and xAI have made voluntary commitments to not pass their costs on to other grid users.⁷ Utilities and regional transmission organizations (RTOs) that operate the electricity grid are also facing pressure: Trump administration officials and a bipartisan group of governors recently filed a letter encouraging grid operator PJM Interconnection to protect residential customers from costs to serve data centers.⁸

“The hyperscalers and AI companies that increase electricity demand must pay for the full cost of the energy and infrastructure needed to build and operate data centers, and must not pass this cost on to the American people. Instead, the data center boom should be leveraged to address affordability and benefit all American households and businesses.”

—Ratepayer Protection Pledge Proclamation, March 4, 2026

These pledges are important, but they’re not enough. A more recent nationally representative CR survey, this one from May 2026, shows that people in the U.S. are skeptical of these pledges, with only 4 percent of Americans “very confident” that these companies will follow through on that commitment.⁹

Without a common framework for identifying how cost shifting occurs, and how proposed data center service agreements address those risks, it is difficult to determine whether projects actually fulfill those commitments. Many cost-shifting risks are difficult to detect. Rather than appearing as explicit subsidies, they may be buried in confidential service agreements, uncertain technical utility planning assumptions, or outdated transmission cost-allocation methodologies, or they may be mediated through complex market and supply chain mechanisms. These indirect costs frequently receive far less attention than direct energy and infrastructure costs, despite potentially having noticeable impacts on customer bills.

Several critical questions remain unresolved:

- Which costs should be assigned directly to data centers?
- How should indirect market and supply chain effects be evaluated?
- How should stranded asset and forecasting risks be incorporated into project review?
- What evidence should be required to support claims that projects will protect residential ratepayer bills?

⁵Consumer Reports nationally representative American Experiences Survey of 2,147 U.S. adults, November 2025, https://article.images.consumerreports.org/image/upload/v1765637158/prod/content/dam/surveys/Consumer_Reports_AES_November_2025.pdf.

⁶“Ratepayer Protection Pledge,” *The White House*, March 4, 2026, <https://www.whitehouse.gov/releases/2026/03/ratepayer-protection-pledge>.

⁷“Fact sheet: President Donald J. Trump advances energy affordability with the Ratepayer Protection Pledge,” *The White House*, March 4, 2026, <https://www.whitehouse.gov/fact-sheets/2026/03/fact-sheet-president-donald-j-trump-advances-energy-affordability-with-the-ratepayer-protection-pledge>.

⁸“Statement of principles regarding PJM,” *U.S. Department of Energy*, January 15, 2026, <https://www.energy.gov/documents/statement-principles-regarding-pjm>.

⁹Consumer Reports nationally representative American Experiences Survey of 2,082 U.S. adults, May 2026, https://article.images.consumerreports.org/image/upload/v1780325596/survey/Consumer_Reports_AES_May_2026.pdf.

- What responsibility should technology companies assume in improving the electricity grid for the benefit of all consumers?

Left unanswered, stakeholders will continue to lack a common language for evaluating and approving proposed projects, leaving ratepayers across the country at significant risk of carrying the financial burden of a growing technology industry.

1.2 Objectives

This report is aimed at stakeholder groups involved in specific data center project evaluation and approval. This includes state public utility commissions, state legislators, consumer advocate offices, regional transmission organizations, utility planners, data center developers and policy teams, and community groups and representatives.

There are two main objectives for this paper. The first is to document and categorize all the possible mechanisms by which data centers can impact costs to other electric utility customers, especially residential ratepayers. This includes not only direct cost-shifting of power infrastructure needed to serve data centers, but also indirect mechanisms mediated by markets or other pathways that often are missing from public discussions. The goal is to have a more comprehensive picture of what may need to be addressed by policymakers and stakeholders to protect consumers.

The second objective is to provide a conceptual framework that can be applied to individual data center proposals, with a set of questions to help elucidate whether cost-impacting mechanisms have been addressed. While the Ratepayer Protection Pledge is a promising statement of intentions, without a structured method to evaluate data center projects there is no credible way to demonstrate and communicate that the pledge is fulfilled. The framework can also be used more broadly as a guide to help support the identification of best practices and development of policy solutions.

This framework is not intended to discourage data center development, but rather to help stakeholders distinguish between projects and practices that merely claim to protect ratepayers and those that demonstrably do so.

Properly structured, large-load growth can increase utilization of existing energy infrastructure, lower system costs, and provide meaningful benefits to surrounding communities.¹⁰ For example, an LBNL analysis of load growth and electricity prices from 2019 through 2024 noted that Nebraska, New Mexico, and North Dakota all experienced double digit load growth while inflation-adjusted retail electricity prices fell, a consequence of more effective, efficient use of the existing system.¹¹ Member companies of the recently formed Utilize Coalition—including tech giants Google and Tesla—encourage state policymakers to recognize the potential for improving efficiency and utilization of the grid already in place as the fastest, least expensive solution to meet growing electricity demand.¹²

Data centers can go beyond a minimum of meeting a “do no harm” standard for the existing grid. They can seek ways to actively and specifically support solutions that benefit the broader system and all system users. This could include data center investments that support adoption of new technologies that

¹⁰Win-Win Watts: Introduction,” *Electric Power Research Institute*, <https://winwin.epri.com/en/introduction.html>.

¹¹Wiser, R. et al., “Retail electricity price trends and drivers: Data update—2026 edition,” *Lawrence Berkeley National Laboratory*, April 2026, https://eta-publications.lbl.gov/sites/default/files/2026-03/retail_price_trends_2026_edition.pdf.

¹²“America needs more power, more affordably,” *Utilize Coalition*, <https://www.utilizecoalition.org>.

can make better use of the existing system (e.g., grid enhancing technologies)¹³ or investments that support development of a virtual power plant (VPP) to leverage flexibility in other customers' demand, or helping to develop and commercialize new energy resources, such as advanced nuclear energy.

These opportunities mean data centers paying their own way is the floor, not the ceiling. Done well, investments made to serve data centers can contribute to a more affordable, reliable, resilient, and cleaner power system. Those benefits need to be actively demonstrated and not assumed.

1.3 Scope and Limitations

This report identifies potential mechanisms through which data center projects may increase electricity costs for existing customers, both directly and indirectly, and describes possible and emerging contractual, regulatory, and operational practices that can mitigate those risks. While we provide our perspective on what we believe are good practices that benefit consumers, the framework in this paper does not have all the answers and is not a checklist or scoring process that stakeholders can apply to specific projects. We hope that it can inform the development of such an evaluation.

This report focuses specifically on electricity cost impacts. It does not evaluate other considerations associated with data center development that local communities and other stakeholders may consider to be critical to a holistic understanding of a specific deal, including land use, water consumption, air quality impacts, noise, good jobs, and local tax revenues.

The taxonomy of cost-shifting mechanisms presented in this report is not intended to be exhaustive or mutually exclusive. Different observers may categorize these mechanisms differently, and additional cost-impacting pathways will likely emerge as utility practices continue to evolve. Nor do all mechanisms exist in every region, given the various regulatory and market structures. We do not attempt to further distinguish which mechanisms may apply to specific regions or utilities.

The report includes real-world examples to illustrate the complexity of data center electricity arrangements. They should not be read as endorsements of particular projects.

Finally, this framework should be viewed as a starting point. Data center electricity arrangements are evolving rapidly, and continued discussion among policymakers, consumer advocates, utilities, technology companies, and researchers will be necessary to refine these concepts over time. CR welcomes feedback on our perspective.

¹³"Pathways to commercial liftoff: Innovative grid deployment," *U.S. Department of Energy*, April 2024, https://static1.squarespace.com/static/67f555826ee1df58205ff806/t/6827af76cb588c0ccb63581b/1747431307855/Liftoff_DOE_Innovative+Grid+Deployment_Apr+2024.pdf.

2. Why This Issue Is Difficult to Evaluate

Understanding whether a data center project shifts costs onto other electricity customers is considerably more difficult than it first appears. Cost impacts are often obscured by fragmented regulatory oversight, confidential commercial agreements, and the technical complexity of utility planning and electricity markets. Any one of these factors would make project evaluation challenging. Together, they make it nearly impossible for policymakers, consumer advocates, and the public to determine whether a proposed project truly protects existing ratepayers.

2.1 Limited Transparency

Many of the most consequential details of a data center electricity agreement are not currently publicly available. Data center deals are frequently negotiated with local governments under nondisclosure agreements (NDAs), limiting public access to information before key land use and permitting decisions are made. On the electricity side, developers often negotiate bespoke electric service agreements (ESAs) with utilities. This general lack of transparency contributes to communities feeling like they are being steamrolled and that their voices don't matter, which is contributing to backlash against data center projects.

The provisions most relevant to evaluating potential cost impacts, including total projected electricity demand, the timing of data center buildout, required infrastructure investments, and cost-allocation agreements, are frequently confidential. Even though the ESAs must be approved by regulators, any stakeholder wishing to review the details must also sign a confidentiality agreement.

A lack of transparency does not necessarily imply that cost shifting exists. Regulators continue to review and approve negotiated agreements. However, when essential project information is unavailable, claims regarding ratepayer protection cannot be independently verified. This limits independent evaluation of both potential cost impacts and proposed protections. It also limits market competition by preventing alternative solutions from being identified and compared.

2.2 Fragmented Regulatory Oversight

Even when information is publicly available, responsibility for reviewing different aspects of a data center project is frequently divided among multiple institutions operating at the local, state, regional, and federal levels. Local governments typically oversee land use and zoning decisions. State public utility commissions regulate retail electricity service and approve utility investments. Regional transmission organizations plan portions of the transmission system and administer wholesale electricity markets. Federal regulators oversee interstate transmission rates and wholesale market rules. As a result, no single proceeding typically provides a complete picture of a project's electricity cost implications. This can create space for cost impacts to fall through jurisdictional cracks and land on consumers' bills.

2.3 Increasingly Complex Electricity Supply Arrangements

The combination of data centers moving rapidly to secure electricity to fuel AI development, the scale of the demand exceeding the current size of some systems, and the novel arrangements that are emerging

can create an extremely complex system that is difficult for even experts to untangle possible cost impacts.

For example, the Northern Indiana Public Service Company (NIPSCO) is building generation and transmission to serve up to 3 gigawatts of planned Amazon data centers—more than the existing combined demand from all of its other customers. The plan includes NIPSCO plans to spin off a separate new entity solely focused on serving data center demand and distinct from the entity serving existing customers. While the new entity will build and operate the generation, NIPSCO will buy the full output of the plant and will build and operate new transmission needed to serve the data centers.¹⁴ NIPSCO claims existing customers will benefit directly through an estimated \$1.25 billion in cost savings along with reliability benefits of the additional capacity.¹⁵ This agreement is both novel and complex, and it is difficult to quickly assess whether the savings are real and where the risk lies if the planned load does not materialize.

2.4 Many Cost Impacts Are Indirect

Most public commitments by technology companies to “pay their own way” are focused on direct electricity use and infrastructure costs. However, limiting the discussion to direct costs overlooks the indirect pathways through which data center development can increase electricity costs for existing customers.

Many of the most significant cost impacts do not arise from any single project. Instead, they emerge collectively through broader market mechanisms, including collective impacts on wholesale electricity prices, capacity markets, transmission planning processes, supply chain constraints, fuel markets, and the cost of capital needed to build new infrastructure. Because these effects cannot easily be attributed to an individual data center, they frequently receive less attention during project review. Yet in aggregate, they may prove as consequential for residential electricity bills as direct infrastructure cost allocation. These indirect impacts are dispersed across many customers and are often based on assumptions and projections that may change over time.

This distinction between direct and indirect cost impacts is one of the central motivations for the framework proposed in this report. A comprehensive evaluation must consider not only the costs explicitly assigned to a project, but also the broader market dynamics through which rapid growth in large-scale data center development can affect electricity prices for everyone else.

¹⁴Howland, E., “NIPSCO to supply 3 GW to Amazon data centers in northern Indiana,” *Utility Dive*, November 25, 2025, <https://www.utilitydive.com/news/nisource-nipSCO-amazon-data-centers-indiana/806396>.

¹⁵“NiSource announces strategic energy infrastructure agreements to enhance customer value and economic growth in Indiana,” NIPSCO, April 16, 2026, <https://www.nipSCO.com/our-company/news-room/news-article/nisource-announces-strategic-energy-infrastructure-agreements-to-enhance-customer-value-and-economic-growth-in-indiana>.

3. Taxonomy of Cost-Impacting Mechanisms

Data center projects can increase electricity costs for existing customers through multiple pathways. This report groups cost shifting risks into three broad categories.

- **Direct cost impacts:** Costs that arise when infrastructure built primarily to serve new data center demand is financed, in whole or in part, by existing utility customers.
- **Indirect cost impacts:** Costs that arise for ratepayers indirectly through new data centers' impacts on electricity markets, fuel markets, and supply chains.
- **Cost risks:** Financial risks that may not increase prices immediately, but could ultimately leave existing customers responsible for paying for infrastructure built to serve projected demand that never materializes.

Collectively, these mechanisms demonstrate that the impact to consumer costs is rarely the result of a single regulatory decision. Instead, large data center development can create a series of interconnected pathways through utility rate-making, transmission planning, wholesale electricity markets, financial risk, and long-term infrastructure investment.

Many of the public commitments made by utilities and technology companies to ensure that data centers “pay their own way” focus primarily on direct infrastructure and electricity usage costs. Those commitments are important and represent the most visible component of the debate. However, as this taxonomy illustrates, protecting residential customers from rising costs requires a broader evaluation that also considers indirect market effects and longer-term financial risks that may ultimately affect electricity bills.

Table. Electricity Cost-Impacting Mechanisms

Category	Mechanism	Primary Risk	Key Decision Makers
Direct cost	Average cost of service rates	Under-recovery of costs if incremental costs are greater than historical average costs	Utility, public utility commission (PUC)
Direct cost	Local transmission regulatory gap	Socialized infrastructure costs	Utility, Federal Energy Regulatory Commission (FERC) formula rates
Direct cost	Regional transmission cost allocation	Socialized transmission costs	Regional transmission organization (RTO), FERC transmission planning
Indirect cost	Energy markets	Higher wholesale electricity prices	Market operator, PUC, or FERC
Indirect cost	Capacity markets	Higher capacity costs	Market operator, PUC, or FERC
Indirect cost	Direct contracting with existing generators	Reduced market supply	Data center offtaker and power generator supplier
Indirect cost	Supply chain and fuels	Higher equipment and fuel costs	Equipment and fuel markets
Indirect cost	Emissions, extreme weather, and wildfire risk	Increased insurance costs and storm recovery costs	Utility, PUC, data center developers' insurance, and resilience investments
Cost risk	Stranded assets	Recovery of infrastructure investment if demand does not materialize	Utility, PUC
Cost risk	Forecast error	Excess infrastructure investment	Utility planners, PUC
Cost risk	Cost of debt risk	Higher financing costs	Utility, credit rating agency risk assessment
Cost risk	Counterparty risk	Default on contractual obligations	Utility contract design, data center developers and subsidiaries

3.1 Direct Cost Impacts

To serve a new data center, utilities typically must construct dedicated interconnection equipment, including transformers, switches, and other equipment constituting a substation, as well as transmission lines. Additional investments may also be required elsewhere on the grid, including transmission upgrades to relieve congestion and new generation resources to maintain reliability.

Because these investments become part of the broader electricity system, regulators must determine how their costs are allocated across all customers. Generally, existing processes rely on some variation of the “beneficiary pays” principle, which seeks to assign costs to customers in proportion to the benefits they receive from new infrastructure.¹⁶

¹⁶Lazar, J.; Chernick, P.; and Marcus, W., “Electric cost allocation for a new era: A manual” (M. LeBel, Ed.), *Regulatory Assistance Project*, January 2020,

This principle generally assumes that investments serve broad, gradually growing demand distributed across many customers. That assumption becomes less reliable when transmission expansion is driven primarily by rapid growth from a relatively small number of exceptionally large customers.

Individual data center facilities can require hundreds of megawatts of new demand, while multiple projects in aggregate can sum to gigawatts of demand within a few years. Existing cost-allocation methodologies were not designed for this scale or pace of concentrated growth.

For example, PPL Electric Utilities in Pennsylvania currently operates a system with a peak load of approximately 7.8 gigawatts but has approved contracts from large-load customers totaling roughly 20 gigawatts to come online in the next few years.¹⁷ Regulatory frameworks developed for decades of gradual load growth may not be well suited to managing a scenario in which a handful of new customers could nearly triple system demand within less than a decade.

3.1.1 Average Cost-of-Service Rates

Traditional embedded cost-of-service rates reflect the historical cost of constructing existing generation and transmission infrastructure. As utilities gradually expand their systems over time, new investments are incorporated into this embedded cost base and recovered from all customers through established rate-making practices. This approach generally works well when electricity demand grows gradually, including steady expansion of homes, businesses, and industries, all sharing in the use of the network.¹⁸

It becomes less effective when a single large customer triggers infrastructure investments whose incremental costs substantially exceed the embedded system average. If a data center requires significant new generation or transmission but pays only an average embedded rate, the revenues collected may not fully recover the cost of serving that load. As those new assets enter the utility's rate base, the remaining costs are spread across all customers, increasing future electricity rates.¹⁹

Embedded average-cost rates can also distort investment decisions by masking locational differences in the cost of providing service. Two otherwise identical data centers may face similar electricity prices even if one requires substantial new infrastructure while the other can be served largely by existing generation and transmission capacity. By failing to reflect these incremental costs, embedded pricing reduces incentives to locate where existing infrastructure can be used more efficiently, potentially increasing future system investment and customer costs.

3.1.2 Local Transmission Regulatory Gap

Unlike most residential and commercial customers, which receive service through the local distribution network, many large data centers connect directly to transmission facilities because of their large electricity demand. Building these connections often requires new local transmission lines and substations.

<https://www.raonline.org/wp-content/uploads/2023/09/rap-lazar-chernick-marcus-lebel-electric-cost-allocation-new-era-2020-january.pdf>.

¹⁷Howland, E., "PPL Electric reaches \$275M rate case settlement, including data center tariff," *Utility Dive*, March 16, 2026, <https://www.utilitydive.com/news/ppl-electric-rate-case-settlement-data-center-tariff/814760>.

¹⁸Lazar, J.; Chernick, P.; and Marcus, W., "Electric cost allocation for a new era: A manual" (M. LeBel, Ed.), *Regulatory Assistance Project*, January 2020, <https://www.raonline.org/wp-content/uploads/2023/09/rap-lazar-chernick-marcus-lebel-electric-cost-allocation-new-era-2020-january.pdf>.

¹⁹Lam, L.; Hledik, R.; and Northrup, N., "Impacts of large loads on electricity rates: A primer," *Energy Systems Integration Group*, May 2026, <https://www.esig.energy/wp-content/uploads/2026/05/ESIG-Large-Load-Rate-Impacts-primer-WP-2026.pdf>.

In regions served by regional transmission organizations (RTOs), these facilities generally become part of the regional transmission system and are recovered through transmission formula rates approved by the Federal Energy Regulatory Commission (FERC). As transmission lines are generally used for wholesale power delivery and used in interstate power transfer, they fall under federal jurisdiction, even if they are “local” lines used to support data center customer interconnection. Those costs are typically allocated across customers according to existing transmission cost-recovery methodologies based largely on total load and transmission network usage.

Although these facilities are constructed primarily to serve individual large-load customers, state regulators generally have limited authority to review either the prudence of the investment or the associated cost-allocation methodology, given the federal jurisdiction. Utilities are also generally not required to publicly identify which customers or class of customers is driving the need for these projects.

As a result, transmission facilities constructed primarily to connect and serve one or more data centers may ultimately be financed, at least in part, by existing utility customers, according to cost-allocation formulas not designed for transmission primarily serving one customer class.

Recent analysis from the Union of Concerned Scientists estimated that in 2024 at least \$4.3 billion in local transmission costs associated with data center development within PJM were allocated to customers through existing transmission cost-recovery mechanisms.²⁰ Because utilities are not generally required to identify which transmission projects primarily serve data centers, however, determining the precise magnitude of these costs remains difficult.

3.1.3 Regional Transmission Cost Allocation

Most regional transmission organizations allocate transmission costs according to some variation of the beneficiary pays principle. The objective is straightforward: Customers who benefit from new transmission should pay approximately in proportion to those benefits, thereby preventing free riders from using infrastructure without contributing to its cost.

As mentioned above, this framework generally assumes that transmission investments serve broad, gradually growing demand distributed across many customers. However, it may not be appropriate when the transmission need is due to massive, sudden growth concentrated in a few very large customers.

Although existing customers may receive secondary benefits from these projects through improved reliability or reduced congestion, many of these transmission investments would likely not have been necessary—or would have occurred much later—but for the addition of large data center loads. Existing customers may therefore bear costs associated with infrastructure whose primary purpose is serving new demand.

For example, PJM identifies regional transmission needs using long-term demand forecasts and competitively solicits transmission developers to meet those needs.²¹ The Maryland Office of People’s Counsel has filed a complaint alleging that several proposed regional transmission projects arising from three PJM solicitations since 2023, driven largely by projected data center development in Virginia, would allocate an estimated \$1.6 billion in transmission costs over the next decade to Maryland customers

²⁰Jacobs, M., “Connection costs: Loophole costs customers over \$4 billion to connect data centers to power grid,” *Union of Concerned Scientists*, September 2025, <https://www.ucs.org/sites/default/files/2025-09/PJM%20Data%20Center%20Issue%20Brief%20-%20Sep%202025.pdf>.

²¹For example, see PJM’s announcement of regional transmission lines selected to be built from a 2023 solicitation: <https://insidelines.pjm.com/pjm-board-of-managers-approves-critical-grid-upgrades>.

under existing cost-allocation rules, despite most of the associated data center development occurring outside of Maryland.²²

3.2 Indirect Cost Impacts

Even when a specific project fully covers its direct infrastructure costs, large-scale data center development can still increase electricity prices through broader market mechanisms. These effects emerge through wholesale electricity markets, capacity markets, fuel markets, and equipment supply chains rather than through utility cost allocation. Because they cannot easily be attributed to a single project, they often receive less attention despite having significant implications for customer bills.

3.2.1 Energy Markets

Wholesale electricity markets generally dispatch the lowest-cost available generators first, with progressively more expensive generators brought online as electricity demand increases. This economic dispatch process promotes competition among generators and minimizes the short-run cost of meeting electricity demand while maintaining system reliability.

Under conditions of gradual load growth, modest increases in electricity demand typically have little effect on average annual wholesale prices. Rapid demand growth, however, can move market prices sharply upward along the supply curve, particularly when available generation becomes scarce in the short and medium term. Those higher wholesale prices are ultimately reflected in retail electricity bills unless utilities or customers have hedged against them through long-term contracts or other mechanisms.

Over the longer term, higher wholesale prices create an economic incentive for new generation to enter the market. Under normal market conditions, this additional competition should place downward pressure on prices. Today's data center expansion, however, is occurring alongside significant constraints on the construction of new generation, including permitting delays, interconnection backlogs, equipment shortages, and labor constraints. These factors slow the market's ability to respond, extending the period during which higher wholesale prices are borne by consumers.

The U.S. Energy Information Administration (EIA) has projected that higher electricity demand could increase average wholesale electricity prices by approximately 4 to 5 percent nationally in 2027 under higher load-growth scenarios, with substantially larger increases possible in regions, such as Texas, where demand is growing rapidly and opportunities to import electricity from neighboring systems are limited.²³

3.2.2 Capacity Markets

In several organized electricity markets, separate forward capacity markets operate alongside wholesale energy markets to ensure that sufficient generating resources will be available to meet future peak demand.

²²United States of America Before the Federal Energy Regulatory Commission, "Complaint requesting fast-track processing of the Maryland Office of People's Counsel," *Maryland Office of People's Counsel*, May 7, 2026, <https://opc.maryland.gov/Portals/0/Files/Publications/Others/20260507%20-%20RTEP%20complaint%20-%20FINAL%20932.pdf?ver=g-tF-4Avtsm8DfgEozavA%3d%3d>.

²³"Fossil generation could rise with faster-than-expected growth in data center power demand," *U.S. Energy Information Administration*, March 12, 2026, <https://www.eia.gov/todayinenergy/detail.php?id=67344>.

Capacity markets were designed around relatively gradual and predictable load growth that provides adequate time for new generation resources to respond to market price signals. Under those conditions, increasing capacity prices encourage investment in new generation, restoring the balance between supply and demand.

The current pace of projected data center development challenges these assumptions. In several regions, projected load growth has increased faster than new generation can be permitted, interconnected, and constructed. As a result, capacity prices have risen sharply while still failing to stimulate sufficient new supply in the near term.

This creates an important timing mismatch. Existing customers begin paying higher capacity prices as soon as projected future demand is incorporated into capacity market forecasts, whereas proposed data centers do not begin paying capacity charges until they actually enter service.

PJM provides a prominent example. Forecasted data center demand has contributed to sustained record-high capacity prices during recent auctions, with prices reaching the market price cap in the last three consecutive auctions. Utilities generally recover these increased capacity costs from retail customers. PJM's Independent Market Monitor has estimated that incorporating projected data center demand into recent capacity auctions increased customer capacity payments by more than \$13 billion.²⁴

3.2.3 Direct Contracting With Existing Generators

Direct bilateral contracts between data centers and existing generating facilities can also increase electricity prices for other customers.

When a data center enters into a long-term agreement with an existing generator that previously sold electricity or capacity into organized markets, a portion of the market's available supply is effectively removed from competitive auctions. Remaining customers must then compete for a smaller supply of available generation, increasing both wholesale energy prices and capacity prices.

From the perspective of the generator and the data center, these agreements provide valuable long-term revenue certainty and price stability. From the perspective of the broader electricity market, however, they may increase the need for additional generation while reducing the amount of existing capacity available to serve other customers.

A high profile example is Amazon's 2025 agreement to purchase nearly 2 gigawatts of output from the Susquehanna nuclear reactor under a 20-year contract.²⁵ This is a sizable amount of capacity no longer available to serve other customers in the PJM market, especially when compared with the 6.5-gigawatt shortfall in capacity from PJM's most recent capacity market auction.²⁶

²⁴"2026 quarterly state of the market report for PJM: January through March: Section 1, Introduction," *Monitoring Analytics, LLC*, May 14, 2026, https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2026/2026q1-som-pjm-sec1.pdf.

²⁵"Talen Energy expands nuclear energy relationship with Amazon," *Talen Energy Corporation*, June 11, 2025, <https://ir.talenenergy.com/news-releases/news-release-details/talen-energy-expands-nuclear-energy-relationship-amazon>.

²⁶"2027/2028 Base Residual Auction reserve target shortfall report" *PJM Interconnection, L.L.C.*, February 9, 2026, <https://www.pjm.com/-/media/DotCom/markets-ops/rpm/rpm-auction-info/2027-2028/2027-2028-bra-reserve-target-shortfall-report.pdf>.

3.2.4 Supply Chain and Fuels

Data centers and utilities are generally building natural-gas-powered resources in order to secure dispatchable power sources that can be deployed as soon as possible. This has led to a gas turbine supply crunch with multiyear timelines for those trying to place an order for a new facility, with one recent analysis finding that natural gas turbine prices have increased by nearly 200 percent since 2019.^{27,28} Similarly, the rapid increase in demand for key pieces of critical power infrastructure such as large power transformers has contributed to higher prices and significantly longer delivery times across the electricity sector.²⁹ As utilities compete for the same equipment regardless of whether they are serving new data center demand, higher procurement costs are ultimately reflected in customer electricity bills.

Some developers are pursuing behind-the-meter generation as a means of avoiding lengthy utility development processes and procedures, while also possibly avoiding direct cost shifting by reducing reliance on shared utility infrastructure. While these arrangements may reduce certain direct infrastructure costs, they can simultaneously increase indirect cost pressures through equipment and fuel markets.

This same dynamic plays out on the natural gas fuel side as well. As more gas-fired generation is developed to serve data centers—whether connected to the grid or located behind the meter—additional demand for natural gas places upward pressure on natural gas prices. Because natural gas currently supplies more than 40 percent of U.S. electricity generation and often sets the wholesale electricity price in market regions, sustained increases in gas prices can raise electricity costs well beyond the regions where data centers are constructed.³⁰

The use of behind-the-meter generation is likely to have larger fuel cost impacts because small-scale, onsite natural gas generators are typically much less efficient than utility scale combined cycle power plants. These smaller systems can also have quite significant local air pollution impacts since they often are subject to fewer regulations and often do not have the same level of pollution controls that large grid connected power plants do.^{31,32,33} Given these factors, in many cases data centers with behind-the-meter gas generation can have greater indirect cost impacts than projects that are grid connected (assuming that cost allocation is done in a way that appropriately assigns the costs of new infrastructure to these projects).

²⁷“Gas turbine prices soar 195% as market faces supply-demand crisis,” *Wood Mackenzie*, April 1, 2026, <https://www.woodmac.com/press-releases/gas-turbine-prices-soar-195-as-market-faces-supply-demand-crisis>.

²⁸Patel, S.C., “Gas power’s boom sparks a turbine supply crunch,” *Power*, April 1, 2025, <https://www.powermag.com/gas-powers-boom-sparks-a-turbine-supply-crunch>.

²⁹McNutt, K.; Boucher, B.; and Dudley, D., “The US data center electrical equipment market: A structural shift in demand,” *Wood Mackenzie*, April 2026, https://go.woodmac.com//131501/2026-04-16/35rfsk/131501/1776335237ZIPsDzzF/Wood_Mackenzie_The_US_Data_Center_Electrical_Equipment_Market.pdf.

³⁰“What is U.S. electricity generation by energy source?” *U.S. Energy Information Administration*, February 29, 2024, <https://www.eia.gov/tools/faqs/faq.php?id=427&t=3> and “U.S. wholesale day-ahead electricity prices rose in 2025 with higher natural gas prices,” *U.S. Energy Information Administration*, February 2, 2026, <https://www.eia.gov/todayinenergy/detail.php?id=6710>.

³¹Raychaudhuri, D., and Volcovici, V., “Pollution from Musk’s unpermitted xAI power project hits hardest in Black communities,” *Reuters*, July 14, 2026, <https://www.reuters.com/world/americas/pollution-musks-unpermitted-xai-power-project-hits-hardest-black-communities-2026-07-14>.

³²Frazin, R. “EPA exempts data center power plants from pollution limits seeking to prevent acid rain,” *The Hill*, July 27, 2026, <https://thehill.com/policy/energy-environment/5992657-epa-data-center-power-plants-acid-rain>.

³³“EPA issues permitting guidance to further President Trump’s agenda promoting data centers and safeguarding communities,” *U.S. Environmental Protection Agency*, July 27, 2026, <https://www.epa.gov/newsreleases/epa-issues-permitting-guidance-further-president-trumps-agenda-promoting-data-centers>.

3.2.5 Emissions, Storms, and Wildfire Risk

Data center demand is currently leading to a surge of investment in natural gas generators as the power supply of choice. It is also leading states and utilities to delay the retirement of coal plants to meet power demand needs for data centers in the near term.³⁴ Use of generators that increase greenhouse gas pollution acts to increase global temperatures and contribute to climate change, and worsens storms and wildfire risks.

Climate change-worsened extreme weather has been a significant driver of increased power sector costs over the last decade, with storms and wildfires increasing in both frequency and severity. This has increased utility expenditures both on recovery from disasters and in mitigation measures to harden systems and increase resilience to extreme weather and wildfires.³⁵ These are real indirect costs of data center related-emissions that are borne by all users of the power system.

3.3 Cost Risks

Utilities must make long-term investment decisions years before projected electricity demand materializes, creating financial risks that may ultimately be borne by existing customers.

Unlike direct cost impacts, which concern how today's infrastructure costs are allocated, cost risks concern who ultimately bears responsibility if projected demand, project economics, or contractual assumptions change over time.

3.3.1 Stranded Assets

Utilities typically recover infrastructure investments over several decades. Transmission lines, substations, and generating facilities are often financed assuming useful lives of 20 to 40 years or longer.

Even when a data center developer agrees to pay the full cost of infrastructure needed to serve its projected electricity demand, there remains the possibility that the anticipated demand never fully materializes. Improvements in computing efficiency, changes in artificial intelligence markets, broader economic conditions, or changes in corporate strategy could all reduce future electricity consumption.

This risk may be particularly acute for AI data centers since there is less experience with long-term use of the expensive and specialized computer chips used for these facilities. Typical data center equipment lifetime is about five years, but there is evidence that some AI chips are experiencing high rates of failure under aggressive AI training loads or are being planned for shorter lifetimes given the rapid pace of hardware evolution.³⁶ If this continuous investment is not made, or if future generations of chips installed require significantly less power, the infrastructure built to serve them may be underutilized.

³⁴Wittenberg, A., "Pollution from coal plants was dropping. Then came Trump and AI," *E&E News*, November 24, 2025, <https://www.eenews.net/articles/ai-gives-coal-plants-a-lifeline-as-trump-makes-them-dirtier> and Good, Q., and Hanson, K., "Data center energy use is giving old, dirty power plants a new lease on life," *Frontier Group*, October 8, 2025, <https://frontiergroup.org/articles/data-center-energy-use-is-giving-old-dirty-power-plants-a-new-lease-on-life>.

³⁵Donohoo-Vallett, P.; King, B.; Kolus, H.; and van Brummen, A., (2026, April 21). "Caught in the current: Historical and prospective drivers of changes in US electricity prices," *Rhodium Group*, April 21, 2026, <https://rhg.com/research/us-electricity-prices-drivers>.

³⁶Duffy, C., "The big wrinkle in the multitrillion-dollar AI buildout," *CNN*, December 19, 2025, <https://www.cnn.com/2025/12/19/tech/ai-chips-lifecycle-questions>; Stanley, B., "Why GPU useful life is the most misunderstood variable in AI economics" *Stanley Laman Group*, November 21, 2025, <https://www.stanleylaman.com/signals-and-noise/gpus-how-long-do-they-really-last>; and Smith, S.J. et al., "United States data center energy usage report: 2025 update," *Lawrence Berkeley National Laboratory*, June 2026, <https://eta.lbl.gov/publications/united-states-data-center-energy-2025>.

If a project is delayed, significantly downsized, or abandoned after infrastructure has already been constructed, utilities may seek to recover the remaining unrecovered investment from other customers unless contractual protections adequately assign that risk to the data center developer.

Because data center projects can represent an unusually large share of a utility's projected load growth, the resulting stranded asset risk is substantially greater than that associated with traditional incremental customer growth.

3.3.2 Forecast Error Risk

Similarly, regional planning decisions must be made years before electricity demand materializes. Overestimating future data center demand can result in generation and transmission investments that exceed actual system needs.

Forecasting uncertainty is particularly significant for data centers because many proposed projects remain speculative for extended periods. Developers frequently evaluate multiple potential locations simultaneously, and utilities often receive numerous service inquiries that may never become operational facilities.

If utilities invest based on overly optimistic forecasts, insufficient new customer revenues may be available to recover the resulting infrastructure costs, increasing the likelihood that existing customers will ultimately bear those costs. Even if demand does materialize later than anticipated, they will be paying for assets that are already partially depreciated through costs recovered from existing customers.

3.3.3 Cost of Debt Risk

Increased financial risk can translate directly into higher customer bills through the higher interest rates that flow through to customers.

Regulated utilities finance power infrastructure with a combination of equity investment and debt. The cost of a utility's debt is determined by credit rating agencies that assess the specific circumstances facing a utility. If specific utilities are investing significantly in infrastructure to serve data centers, credit rating agencies may perceive increased risk to utilities with all of the investments arising from demand that is concentrated in a handful of data center customers. Other risks include construction risk, service agreement risks, expiration of data center service agreements, and impacts on existing customers as factors that could lower a utility's credit rating.³⁷

If those risks result in lower credit ratings or higher borrowing costs, utilities will generally recover those increased financing costs through customer rates, increasing electricity bills for all customers.

3.3.4 Counterparty Risk

Strong contractual protections are only as effective as the financial strength of the entity responsible for fulfilling them.

Many large data center developments are financed through special purpose vehicles (SPVs), which are legally separate entities created to develop and own individual facilities. These structures are common

³⁷"Select: The data center boom is bringing both growth and growing pains," *S&P Global Ratings*, 2025, <https://www.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/101648906>.

project-financing mechanisms and can provide important financial and operational benefits. However, they also affect how financial liabilities are allocated.

On paper the parent company does not own the data center, it is simply renting the facility from the SPV. Because the SPV is legally distinct from the parent technology company, obligations associated with the data center might not automatically extend to the parent company's balance sheet.³⁸ If a SPV becomes insolvent and contractual protections are insufficient, the utility providing power may have limited ability to recover the remaining costs associated with the infrastructure constructed to serve that project.

Accordingly, evaluating a data center's stranded asset protections requires more than reviewing contract length, minimum billing provisions, and exit fees. It also requires understanding which entity is legally responsible for those obligations and whether sufficient financial assurances exist to ensure that contractual commitments remain enforceable over the life of the infrastructure investment.

³⁸"Client alert: Emerging litigation risks in financing AI data centers boom," *Quinn Emanuel Urquhart and Sullivan, LLP*, 2026, <https://www.quinnemanuel.com/the-firm/publications/client-alert-emerging-litigation-risks-in-financing-ai-data-centers-boom>.

4. Framework for Evaluating Data Center Projects' Electricity Cost Impacts

The preceding section identified the principal mechanisms through which data center development can increase electricity costs for existing customers. This section offers a practical framework that policymakers, consumer advocates, utilities, developers, and other stakeholders can use to evaluate individual projects. It identifies the information, contractual commitments, and operational practices needed to assess whether a project is likely to avoid direct cost shifting, minimize indirect market impacts, and appropriately manage long-term financial risks.

This framework should be viewed as a starting point rather than a definitive methodology. As utility practices, electricity markets, and data center business models continue to evolve, additional evaluation criteria will likely emerge. The framework is intended to evolve alongside industry practice while providing a consistent foundation for project evaluation today.

4.1 Effective Evaluation Begins With Transparency

A prerequisite for any thorough evaluation of cost shifting is transparency. Without access to basic information about a project's electricity demand, infrastructure requirements, and financing and ownership structure, regulators and other stakeholders cannot determine whether a proposed project adequately protects existing customers or will provide meaningful benefits.

Throughout the framework below, transparency should therefore be considered an overarching evaluation principle. Across every evaluation dimension in this framework, stakeholders should ask whether enough information has been made publicly available to independently assess the project's potential impacts on existing customers.

Confidential treatment should be limited to genuinely proprietary commercial information rather than basic information necessary for evaluating customer impacts. Some companies have begun moving toward greater transparency. In 2026, Microsoft announced that it would no longer require NDAs with local governments during data center development negotiations.³⁹ While this represents meaningful progress, confidential utility agreements remain common across the industry, and this does not address the details of the project needed to inform realistic assessments of possible cost impacts.

Conversely, announcements highlighting renewable energy procurement frequently omit basic information such as the size of the associated data center, the timing of electricity demand, and the structure of the underlying power purchase agreement. Without these details, stakeholders cannot determine whether the announced resources meaningfully address project electricity demand or associated cost impacts. While Consumer Reports recognizes that electricity demand is often treated as sensitive business information because it can be used by competitors to estimate computational power and AI capabilities, we believe that on balance, greater transparency throughout the industry is beneficial.

³⁹"Putting communities first: Our decision to end NDAs with local governments," *Microsoft*, March 18, 2026, <https://local.microsoft.com/blog/putting-communities-first-our-decision-to-end-ndas-with-local-governments>.

For example, Google and Xcel Energy in Minnesota have announced a deal that will bring 1.9 gigawatts of new clean electricity and storage to support a data center.⁴⁰ This is a sizable investment in capacity, but without knowing the ultimate power demand of the proposed data center, stakeholders can't judge whether this will cover the data center demand, or if there will even be excess to support the rest of the system.

4.2 Six dimensions of a data center deal

Consumer Reports advocates that data center and other large-load projects disclose sufficient information to allow independent evaluation of the following six dimensions of a deal:

1. Power Generation
2. Transmission Infrastructure
3. Stranded Asset Protection
4. Flexibility and Grid Integration
5. Clean Energy
6. Community Benefits

Each section below describes why the evaluative dimension matters, characteristics of stronger project designs, questions stakeholders should ask, and illustrative examples where relevant.

4.2.1 Power Generation

How a data center procures electricity has significant implications for both direct and indirect cost impacts on existing customers.

Large data centers require extraordinary amounts of electricity. If that demand is met through utility-procured generation without adequate cost recovery, other customers may bear a portion of the associated generation costs. Even where direct generation costs are fully assigned to the data center, different procurement strategies can still influence wholesale electricity prices, capacity markets, equipment supply chains, and fuel costs. For these reasons, the method by which a project secures electricity is often as important as the amount of electricity it consumes.

Increasingly, developers are pursuing direct procurement of new generation—sometimes referred to as bring your own generation (BYOG) or bring your own capacity (BYOC)—to reduce reliance on utility investments and minimize cost shifting. These approaches can substantially reduce direct customer impacts when properly structured, but they require careful evaluation because they may also create indirect market effects or transfer costs to other parts of the electricity system.

Similarly, many developers procure renewable or other clean energy resources through various power purchase agreements (PPAs) to meet corporate sustainability commitments and are an important piece of electricity supply for new data centers. These arrangements vary considerably in their ability to provide dependable energy and capacity to serve the data center, and require careful evaluation.

⁴⁰"Xcel Energy to power new Google data center in Minnesota," February 24, 2026, *Xcel Energy*, <https://newsroom.xcelenergy.com/news/xcel-energy-to-power-new-google-data-center-in-minnesota>.

As mentioned above, maximizing the use of existing transmission and efficient, low-cost generating assets is a proven way to lead to lower cost pressures for existing customers, through spreading fixed costs over a larger amount of electricity sales. In the generation space this could look like supporting and developing capacity provided by virtual power plants—aggregations of other customer-sited assets like solar power, home batteries, electric vehicles, and demand-side resources—that can provide peak capacity during times of system constraint and enable better use of existing capacity on the system when not at peak times.⁴¹

What “Paying Their Own Way” Looks Like

Projects are paying for new generation in ways that benefit the system overall and invest in solutions that make better use of existing generation, specifically:

- Procuring new generation rather than reallocating existing generation serving other customers.
- Maximizing the use of spare headroom on existing efficient generators, through approaches like virtual power plants that provide accredited capacity.
- Aligning the timing of new generation with the timing of new electricity demand.
- Paying the full incremental cost of any new utility-supplied generation.
- Avoiding worsening equipment shortages or fuel market pressures through use of alternatives to natural-gas-fueled generators.
- Clearly define long-term ownership and operational responsibility for any on-site generation.

Key Evaluation Questions

Expected Electricity Demand

- What is the project’s planned peak electricity demand?
- How will electricity demand increase over the course of construction and operation?
- Will on-site generation and backup resources be installed, and how will they be used?

Direct Procurement From Existing Grid Generation

- Is the generator currently participating in wholesale energy or capacity markets?
- Will the agreement remove existing generation from those markets?
- Is the contracted generator at risk of retirement without the new contract?
- Will the agreement enable additional generating capacity through plant upgrades or life extension?

Utility-Supplied, Existing Generation

- Is the applicable rate based on embedded historical costs or forward-looking incremental costs?
- Does the tariff recover the full incremental cost of serving the project?
- Does the project make more effective use of existing efficient generating resources before requiring construction of new generation?

⁴¹“Voltus and Google to deliver grid capacity and local economic benefits through Bring Your Own Capacity agreement,” *Voltus*, June 2, 2026, <https://www.voltus.co/press/voltus-google-bring-your-own-capacity-pjm>.

New Generation, Utility-Supplied, or Direct Procurement

- Will the new generation enter service before the data center begins operation?
- If not, how will electricity be supplied during the interim period?
- Is the generation dedicated entirely to the data center, or will excess energy and capacity remain available to the broader market?
- How are the costs and benefits of new generation allocated among customers?
- Are approaches that maximize use of existing assets (e.g., virtual power plants) used? Do these approaches provide accredited capacity?

Behind-the-Meter Generation

- What technologies are being used?
- Is the on-site generation capable of serving the facility's full demand or only a portion?
- Is the system fully isolated from the grid or interconnected?
- Does the on-site power reduce the contracted power load by the utility?
- What occurs during planned maintenance or unexpected outages?
- Is the utility expected to assume ownership of the generating assets in the future?
- Does the technology rely on equipment currently experiencing supply chain constraints?
- What is the technology, its emissions profile, and duty cycle compared with its typical use? Is there a demonstration of the technology being used this way for extended periods of time?

Case Study

In January 2026, Meta announced a deal supporting nuclear energy procurement, including contracting with 2.1 gigawatts of existing nuclear power from two plants in Ohio.⁴² The agreement includes a 20-year power purchase commitment, supporting lifetime extension and capacity uprates of the two facilities. On the positive side, the agreement clearly supports over 400 megawatts through enabling investments that will increase the capacity of the existing plants. This deal provides the offtake and price certainty needed to make the lifetime extension investments and otherwise avoid possible retirement.

At the same time, important questions remain regarding broader market impacts. Publicly available information does not indicate whether the full output of these facilities will effectively exit PJM's capacity market, how any resulting reduction in available market capacity would affect other customers, or how electricity demand will be served before planned capacity uprates become operational. These leave open pathways for cost impacts to other customers.

4.2.2 Transmission Infrastructure

Transmission infrastructure is among the largest and longest-lived investments made to serve new electricity demand. Because transmission facilities are shared assets that often serve multiple customers over several decades, determining who should pay for those investments is one of the most consequential—and most contested—aspects of large data center development.

⁴²"Meta announces nuclear energy projects, unlocking up to 6.6 GW to power American leadership in AI innovation," *Meta*, January 9, 2026, <https://about.fb.com/news/2026/01/meta-nuclear-energy-projects-power-american-ai-leadership>.

While data center projects may produce broader reliability or congestion benefits, transmission investments constructed primarily to serve new large loads should generally be financed by those customers rather than socialized across existing ratepayers. One example is Pennsylvania's model tariff for large-load customers using a "but for" standard, which explicitly recognizes that infrastructure built primarily to serve large-loads differs from other infrastructure and requires updated cost-allocation policies. As described in the order:

*"... if a Network Improvement would not have been needed 'but for' the interconnection of the Large Load Customer, then the costs of the upgrade should be allocated to that customer irrespective of whether other customers would benefit from it."*⁴³

Care needs to be taken that measures designed primarily to ensure against stranded assets—e.g., transmission security agreements—are not inappropriately positioned as protecting against all cost impacts. If these agreements use cost-allocation processes that focus only on backward-looking embedded cost rates, then they are not sufficiently protecting against all cost impacts because they do not reflect the cost of the incremental transmission being built.⁴⁴

Data center owners, utilities, and regulators need to proactively act to update cost-allocation assumptions and procedures, especially for the local lines that are needed to support data center interconnection but fall within the state and federal regulatory gap.

What "Paying Their Own Way" Looks Like

Transmission infrastructure built primarily to serve data center customers should primarily be paid for by those customers. Specifically, strong transmission arrangements should:

- Allocate infrastructure costs based on forward-looking actual incremental costs rather than historical costs.
- Identify new transmission facilities, local and regional, that are required to serve the project, to inform updating local and regional cost-allocation formulas.
- Maximize the use of headroom on the existing transmission system through advanced technologies and ideal locations.
- Not assume that existing transmission cost-allocation frameworks are sufficient for transformative loads.

Key Evaluation Questions

Infrastructure Needs

- Can existing transmission infrastructure accommodate the project?
- Does the project include investments that improve utilization of existing transmission infrastructure (e.g., grid enhancing technologies)?
- What new local transmission facilities are required to serve the project?
- What regional transmission upgrades are required?

⁴³"PUC releases final order establishing first-of-its-kind large load model tariff framework," *Pennsylvania Public Utility Commission*, May 13, 2026, <https://www.puc.pa.gov/press-release/2026/puc-releases-final-order-establishing-first-of-its-kind-large-load-model-tariff-framework-05132026>.

⁴⁴Kavulla, T., "How will data centers pay for power?" *American Affairs*, 10(2), May 20, 2026, <https://americanaffairsjournal.org/2026/05/how-will-data-centers-pay-for-power>.

- Which upgrades would not have been necessary but for the data center?

Cost Allocation

- Are transmission costs based on embedded historical costs or forward-looking incremental costs?
- Does the project pay for infrastructure constructed primarily to serve its demand?
- What formulas are used to allocate costs for identified required local and regional transmission?
- How are broader system benefits identified and quantified?
- Are both state and federal regulators reviewing transmission investment for prudence, or are formulas being used?

Case Study

ComEd, a utility in Illinois, has announced the use of transmission security agreements (TSAs) in part to ensure that a group of data center customers representing a combined 6.5 gigawatts of new demand to pay their fair share of \$2 billion worth of transmission investments. The TSA requires 10-year commitments of minimum payments from the data center customers to cover transmission investments, regardless of actual use.⁴⁵ While this helps protect other customers from paying for stranded assets in the event of lower than anticipated demand, the TSA does not identify the specific facilities required and says that any new investments will be rolled into its existing transmission formula rates paid by all customers.⁴⁶ If the new transmission investments are substantial compared with the existing historical embedded transmission costs, then other customers' transmission costs will increase, regardless of any minimum payments assured by the TSA.

4.2.3 Stranded Asset Protections

Long-term contractual commitments are among the most important mechanisms for protecting existing customers from stranded asset risk.

Large data centers present unusually high stranded asset risk because their electricity demand can represent a significant share of a utility's projected load growth. If expected demand does not materialize, infrastructure constructed specifically to serve that demand may remain in service long after the associated customer has reduced operations or departed the system. A downward correction in AI demand is a real risk, given the uncertainties in the industry, including how quickly new AI chips will depreciate and the circular, interlocking financing arrangements between many of the sector's biggest companies.⁴⁷

Recognizing this risk, utilities and regulators have increasingly developed specialized large-load tariffs designed to require stronger, long-term contractual commitments from large customers. As of July 2026,

⁴⁵ComEd announces new agreements signed to ensure large load customers pay their fair share to connect with and use the grid," *ComEd*, January 6, 2026, <https://www.comed.com/news/news-releases/2026-1-6>.

⁴⁶Chang, J.W., "Commissioner Chang's concurrence to Transmission Security Agreement between Commonwealth Edison Company (ComEd) and Aligned Data Centers (Acquisition) PropCo, LLC, ER26-839-000," *Federal Energy Regulatory Commission*, February 17, 2026, <https://www.ferc.gov/news-events/news/commissioner-changs-concurrence-transmission-security-agreement-between>.

⁴⁷Arun, A., "Bubble or nothing: Data center project finance," *Center for Public Enterprise*, November 2025, <https://publicenterprise.org/report/bubble-or-nothing>.

more than 100 large-load tariffs have now been approved or are under development nationwide.⁴⁸ Similar contractual arrangements may be present in negotiated electric service agreements for individual data centers.

Not all stranded asset protections provide the same level of security, however. Their effectiveness depends on the scale of infrastructure investment, the financial strength of the customer, and the contractual mechanisms available if project assumptions change over time.

What “Paying Their Own Way” Looks Like

Other customers are protected by robust agreements that require significant financial stake and long-term commitments by data center customers that match the magnitude and lifetime of the needed infrastructure. Strong stranded asset protections generally include:

- Long-term contractual commitments sufficient to pay down required infrastructure.
- Meaningful minimum billing requirements.
- Substantial collateral and enforceable exit provisions.
- Clear allocation of financial responsibility between subsidiaries and parent companies.
- Robust procedures for validating projected demand and deterring speculative projects, before major infrastructure investments are approved, and updating forecasts throughout the project.

Key Evaluation Questions

Contractual Commitments

- What are the principal terms of the electric service agreement?
- What is the contract duration and payment schedule?
- How are customer charges calculated?
- Does the contract extend over a meaningful portion of the expected life of the infrastructure being constructed?
- Is the commitment proportional to the size of the investment?
- Does the agreement deviate from existing tariffs?

Minimum Billing

- Is minimum billing based on the incremental cost of serving the project?
- Does it recover a meaningful share of fixed infrastructure costs?
- Is it significant relative to expected electricity consumption?

Collateral

- Are exit fees sufficient to cover unrecovered infrastructure costs?
- Is collateral required?
- How large are these commitments relative to total infrastructure investment?

⁴⁸“DELTA: Database of emerging large-load tariffs,” *Smart Electric Power Alliance and NC Clean Energy Technology Center*, retrieved September 15, 2026, <https://sepapower.org/large-load-tariffs-database>.

Parent-Subsidiary Relationship

- What is the legal relationship between the data center project owner and any parent company?
- Which entity ultimately bears financial responsibility if the project becomes insolvent?

Project Forecasting and Validation

- How are forecasted data center loads determined?
- Is there an interconnection process or queue to evaluate the certainty of individual projects as they develop?

Construction Financing

- Who finances generation and transmission while it is under construction?
- Does the large-load customer provide up-front funding?
- Are costs recovered through construction work in progress (CWIP) charges paid by existing customers?

Case Study

Several recently approved large-load tariffs illustrate approaches that strengthen stranded asset protections through longer contractual commitments, enhanced minimum billing provisions, and additional financial security. For example, Virginia regulators have approved a new rate class specifically for large-load customers of Dominion, which take service starting in 2027. This requires new large customers seeking service to post \$1.5 million per megawatt of collateral, which can be reduced if the customer has a high credit rating. It also requires a 14-year commitment for service with minimum billing of 85 percent of contracted transmission and 60 percent of contracted generation. Customers can reduce their contracted capacity by up to 20 percent at no charge, but doing so requires three years' notice.⁴⁹

4.2.4 Flexibility and Grid Integration

Actions that enable better use of existing assets may be the most effective strategy for reducing both direct and indirect electricity cost impacts because it can defer or eliminate the need for expensive new infrastructure while improving overall grid utilization and reliability.

Unlike traditional electricity customers, many modern data centers can temporarily reduce, shift, or supply portions of their demand with on-site resources during periods of system stress. If incorporated into project design from the outset, these capabilities can benefit both developers and existing customers by improving utilization of existing infrastructure, accelerating interconnection, reducing future investment needs, and reducing pressure on other customers' electricity bills.

The operational significance of these facilities also extends beyond cost. Because large data centers can represent a substantial share of local system demand, sudden changes in their electricity consumption can affect grid reliability. Recognizing this, the North American Electric Reliability Corporation (NERC) issued a Level 3 Alert directing grid operators to collect additional operational information from large

⁴⁹"Final order: Application of Virginia Electric and Power Company (Case No. PUR-2025-00058)," *Virginia State Corporation Commission*, November 25, 2025, <https://www.scc.virginia.gov/docketsearch/DOCS/89g6011.PDF>.

computational loads.⁵⁰ Additional requirements around when and how rapidly data centers either increase or decrease their demand may be needed to protect grid stability.

Flexibility can take many forms, including demand response, temporary load curtailment during peak conditions, batteries, and other on-site resources that reduce grid demand, and investments in broader grid flexibility such as virtual power plants. During emergency conditions, flexible data centers may also agree to curtail demand before utilities interrupt service to other customers—a practice already reflected in state law in Texas,⁵¹ or as a condition of service as directed by regulators (such as in a Michigan Public Service Commission order).⁵²

Industry efforts have begun to organize around solutions in this space,⁵³ and developers have demonstrated that significant amounts of flexibility are possible if built into the up-front design and operations.⁵⁴

What “Paying Their Own Way” Looks Like

Data centers should incorporate flexibility into their design and operations to make better use of existing efficient generation and transmission infrastructure. Projects demonstrating strong flexibility:

- Provide firm capacity that utilities can count on to meet resource adequacy requirements.
- Provide flexibility capacity that is significant in scale relative to overall power demand of the data center.
- Enable the turning down of data center demand during emergencies ahead of any loss of service to residential customers.

Key Evaluation Questions

Operational Flexibility and Capabilities

- Can the project reduce its electricity demand during system peaks?
- What percentage of total demand can be curtailed or shifted?
- Is flexibility available year-round or only under limited conditions?
- Is the data center required to curtail load during grid emergencies?

⁵⁰“Essential action to industry: Computational load modeling, studies, instrumentation, commissioning, operations, protection, and control” (Level 3 NERC alert), *North American Electric Reliability Corporation*, May 4, 2026, <https://www.nerc.com/globalassets/programs/bpsa/alerts/level-3-computational-load-alert.pdf>.

⁵¹Martucci, B., “Texas law gives grid operator power to disconnect data centers during crisis,” *Utility Dive*, June 25, 2025, <https://www.utilitydive.com/news/texas-law-gives-grid-operator-power-to-disconnect-data-centers-during-crisi/751587> and S.B. 6, 89th Leg., Reg. Sess. (Tex. 2025). <https://legiscan.com/TX/drafts/SB6/2025>.

⁵²“MPSC approves DTE Electric energy contracts for data center with conditions to strengthen protections for other customers,” *Michigan Public Service Commission*, December 18, 2025, <https://www.michigan.gov/mpsc/commission/news-releases/2025/12/18/mpsc-approves-dte-electric-energy-contracts-for-data-center>.

⁵³“America needs more power, more affordably,” *Utilize Coalition*, retrieved September 15, 2026, <https://www.utilizecoalition.org/home#foundingsupporters> and “Integrating Data Centers into the Grid: Benefits of Flexibility and Strategic Siting,” *Electric Power Research Institute*, November 17, 2025, <https://www.epri.com/research/products/000000003002033797>.

⁵⁴Giacobone, B., “Verrus successfully demos its flexible data center technology,” *Latitude Media*, May 15, 2025, <https://www.latitudemedia.com/news/verrus-successfully-demos-its-flexible-data-center-technology>.

On-Site Resources

- Does the project use batteries, dispatchable generation, or other resources to provide flexibility?
- Are these resources intended primarily for backup power or active grid support?
- What are the emissions profiles of on-site resources and how frequently are they expected to be run?

Grid Integration

- Is participation mandatory under the electric service agreement or voluntary?
- Can the grid operator dispatch the flexibility directly?
- Is the data center required to shed load ahead of other customers during a grid emergency?
- Are there limits on the duration or frequency of dispatch?

System Benefits

- Does flexibility reduce required transmission investment?
- Does it reduce generation procurement?
- Does it improve utilization of existing infrastructure?

System Operations

- Has the developer provided operational information requested by NERC?
- Does the project comply with applicable NERC reliability guidance for large computational loads?
- How will operational coordination occur with the utility and system operator?

Case Study

Google's proposed data center in Hermantown, Minn., demonstrates both the promise and the current limitations of data center flexibility. Public statements indicate that Google intends to work with Minnesota Power to develop demand-response capabilities supporting regional resource adequacy requirements.⁵⁵⁵⁶ The project's electric service agreement also references participation in Minnesota Power's demand-response programs or an "alternative product" that delivers an equivalent amount to meet resource adequacy requirements. The ESA contains an applicable rider for large power demand response service, which defines two types of demand response: one for short-term emergency capacity and one for "market surplus service."⁵⁷ This means the flexibility is being used to directly offset otherwise needed generation because it is directly being used to offset Minnesota Power resource adequacy requirements.

⁵⁵"Minnesota Power will provide energy to new Google data center," *Minnesota Power*, March 3, 2026, <https://hermantownmn.com/wp-content/uploads/2026/03/PressRelease03032026.pdf>.

⁵⁶Terrell, M., "A new milestone for smart, affordable electricity growth," *Google*, March 19, 2026, <https://blog.google/innovation-and-ai/infrastructure-and-cloud/global-network/demand-response-data-center-milestone>.

⁵⁷Minnesota Power, and Harmony Group, LLC, Electric service agreement (public version with trade-secret data excised), PUC Docket No. E-015/M-26-159, *Minnesota Public Utilities Commission*, March 27, 2026, <https://efiling.web.commerce.state.mn.us/documents/%7B806E309D-0000-C91E-8D8A-A932702A2D19%7D/download?contentSequence=0&rowIndex=1>.

However, key information—including the size of the data center and the amount of committed demand response—has been redacted. As a result, it remains difficult to determine whether the proposed flexibility represents a meaningful reduction in infrastructure needs or an aspirational commitment that will be developed later.

4.2.5 Clean Energy

Use of clean electricity sources helps address key cost-impact mechanisms. Most notably, the more clean electricity used, the less greenhouse gas pollution is generated and incremental warming of the climate is avoided. This reduces the impact of climate change on extreme weather and wildfire risks, which are a major driver of increased power system costs.⁵⁸ In addition, use of clean electricity can displace some demand for natural gas turbines and natural gas fuel, which lessens the impact of the supply chain crunch on turbine prices and avoids additional demand that can drive up natural gas prices for all customers.

Major data center developers have been and continue to be major procurers of renewable power, with Amazon, Google, Meta, and Microsoft together collectively signing over 16 gigawatts of renewables contracts in 2025, representing 80 percent of the total volume of corporate contracts for renewable power.⁵⁹ This is commendable, but care must be taken to ensure that specific clean energy procurement announcements to serve data centers actually reduce pollution, displace emitting generators, and are additional to what would have been otherwise built.

Data centers generally procure clean electricity through power purchase agreements (PPAs) directly with a renewable resource or mediated through a utility. Sometimes these are agreements to only purchase the environmental attributes from a project and not the actual electricity (aka a virtual PPA). Corporate sustainability commitments often cover annual matching, ensuring enough renewable electricity is purchased in aggregate to cover the data center demand over the course of a year. This is beneficial for supporting clean energy, but ultimately is an accounting approach and does not ensure the data center is supplied by clean electricity on an hourly basis, and means other resources are being used—most likely natural gas. Research has indicated that a “three pillars” approach that ensures hourly matching, deliverability, and incrementality is necessary to demonstrate that a given clean electricity project is actually serving data center demand.⁶⁰

In addition, some data center developers are signing agreements and making commitments to support emerging clean technologies that are still commercializing and scaling up, such as enhanced geothermal, small modular nuclear, and carbon capture. These are important commitments because they provide the offtake and price certainty that these technology developers need to finance and build clean energy-generating resources at scale—often at a price premium that utilities and other customers are not willing to pay. Ultimately supporting successful commercialization of additional clean technologies helps provide competition to keep power prices down and avoids future use of natural gas to meet new demand. At the same time, these deals need to be assessed to ensure data center developers are not using speculative commitments for a future technology that will not be deployed at scale for a decade or more as a substitute for the current need to use clean electricity.

⁵⁸Donohoo-Vallett, P.; King, B.; Kolus, H.; and van Brummen, A., (2026, April 21). “Caught in the current: Historical and prospective drivers of changes in US electricity prices,” *Rhodium Group*, April 21, 2026, <https://rhg.com/research/us-electricity-prices-drivers>.

⁵⁹Huq, N., “Hyperscalers continue to dominate corporate renewables contracts in 2025,” *S&P Global Energy*, February 27, 2026, <https://www.spglobal.com/energy/en/news-research/latest-news/electric-power/022726-feature-hyperscalers-continue-to-dominate-corporate-renewables-contracts-in-2025>.

⁶⁰Bistline, J.E.T. et al., “System effects of carbon-free electricity procurement on regional technology, costs, and emissions,” *The Electricity Journal*, advance online publication, 2026, <https://www.sciencedirect.com/science/article/abs/pii/S1040619026000102>.

Emerging tools a few data center developers and utilities are exploring are called clean transition tariffs (CTT) and accelerating clean energy (ACE) tariffs. These agreements are designed to allow large-load customers to help fund and de-risk utility investments in clean energy sources to meet their energy needs.⁶¹ These tools, however, are not yet widely utilized.

Again highlighting the importance of project and information transparency, project press releases often highlight renewable or other clean energy investments that occur alongside the project. However, without knowing the size of the data center demand or other details of the PPA, it is often difficult to assess how well the clean electricity projects will actually provide the electricity needed and avoid fossil fuel consumption and the associated pollution.

What “Paying Their Own Way” Looks Like

Data center developers should procure clean energy to match—ideally hourly—most of their electricity demand. The strongest clean energy strategies:

- Increase total electricity supply through procurement of new clean energy resources.
- Closely match the electricity demand temporal profile of the data center.
- Procure projects in the same geographic region as the data center.
- Provide meaningful commitments to support technologies that expand future clean energy options.

Key Evaluation Questions

Scale

- How much electricity will the clean resource generate relative to the project’s annual consumption?

Deliverability

- Is the resource located within the same regional electricity market?
- Can the electricity physically serve the data center?

Additionality

- Is the project financing new generation?
- Or, is it purchasing output from existing resources?

Temporal Matching

- Is electricity matched annually or hourly?
- What resources supply electricity during periods when renewable generation is unavailable?

⁶¹Flanagan, C., “Clean transition tariffs: An innovative way to accelerate power sector emission reductions,” *Center for Climate and Energy Solutions*, August 2024, <https://www.c2es.org/2024/08/clean-transition-tariffs-an-innovative-way-to-accelerate-power-sector-emission-reductions>.

Emerging Technologies

- Does the project support commercialization of technologies such as geothermal, advanced nuclear, long-duration storage, or carbon capture?
- What power sources does the project depend on before longer-lead-time investments in emerging technologies come online?
- Is there a backup plan if higher-risk emerging technology investments don't pan out?

Case Study

Meta is building a 5-gigawatt data center campus in northern Louisiana, with an intended investment of over \$50 billion.⁶² The data center will be served by the local power company Entergy through an individual ESA. This is a large-scale investment, given Entergy lists total owned generating capacity as 24 gigawatts.⁶³ Entergy is seeking to construct over 7.5 gigawatts of new natural-gas-generating facilities to serve the data center.⁶⁴

Meta has announced that it will match 100 percent of annual data center demand and will support 2.5 gigawatts of new clean energy through the agreement with Entergy,⁶⁵ in addition to supporting capacity uprates at existing nuclear facilities and funding exploratory assessments of new nuclear and carbon capture projects.⁶⁶

However, the announcements and public regulatory materials are not detailed enough to understand how the agreement will lead to 100 percent annual matching with clean energy. The 2.5 gigawatts of committed new renewables will not be sufficient to cover a 5-gigawatt data center demand, and the specific renewable projects have not been identified. Relatedly, testimony filed by the Louisiana Energy Users Group indicated that the Meta data center would receive preferential access to solar power ahead of an existing pipeline of solar projects that Entergy is developing for existing customers, potentially reducing renewable energy available to other customers in the future.⁶⁷ Entergy is also seeking regulatory approval to expand the geographic area over which they can procure renewable resources—this would include all of the Midcontinent Independent System Operator (MISO), which covers an area that includes locations as far away as Iowa, Minnesota, and the Dakotas, and has known transmission constraints to the south.⁶⁸ The commitments for nuclear uprates are relatively small (45 megawatts and 125

⁶²"Deepening our investment in Richland Parish, Louisiana," *Meta Data Centers*, July 13, 2026,

<https://datacenters.atmeta.com/2026/07/deepening-our-investment-in-richland-parish-louisiana>.

⁶³"Power generation," *Entergy Corporation*, retrieved September 15, 2026, <https://www.entergy.com/operations/generation>.

⁶⁴5.2 GW of new natural gas is being added to previously announced 2.3 GW of natural gas. See <https://www.entergy.com/news/entergy-louisiana-power-meta-s-data-center-in-richland-parish> and <https://www.entergy.com/news/entergy-louisiana-announces-a-new-agreement-with-meta-that-will-deliver-an-additional-2b-in-customer-savings>.

⁶⁵"Deepening our investment in Richland Parish, Louisiana," *Meta Data Centers*, July 13, 2026,

<https://datacenters.atmeta.com/2026/07/deepening-our-investment-in-richland-parish-louisiana>.

⁶⁶Scardigli, B., "Entergy Louisiana announces a new agreement with Meta that will deliver an additional \$2B in customer savings," *Entergy*, March 27, 2026,

<https://www.entergy.com/news/entergy-louisiana-announces-a-new-agreement-with-meta-that-will-deliver-an-additional-2b-in-customer-savings>.

⁶⁷Entergy Louisiana, LLC, Application for certification of generation and transmission resources and for other relief (Docket No. U-37882), *Louisiana Public Service Commission*, 2026,

<https://lpscpublicvalence.lpsc.louisiana.gov/portal/PSC/ViewFile?fileId=w1b5pnKfRdg%3d>.

⁶⁸Hausman, C., "Power flows: Transmission lines, allocative efficiency, and corporate profits" (NBER Working Paper No. 32091), *National Bureau of Economic Research*, February 2024, <https://doi.org/10.3386/w32091>.

megawatts), and the further commitments to possible new nuclear and carbon capture are limited to technical evaluations.⁶⁹

The entire ESA is designated as highly sensitive and not available for public viewing in the regulatory docket,⁷⁰ so it is difficult to confirm the details of the agreement. Based on public statements by Meta and Entergy about the project so far, it appears to pair large, firm, near-term investments in a significant buildout of new natural gas generation infrastructure with vague and speculative future promises of support for clean energy at some undefined point in the future.

4.2.6 Community Benefits

Although this report focuses primarily on electricity affordability, large data center developments also affect surrounding communities both positively and negatively through employment, infrastructure investments, tax revenues, water consumption, air and water pollution, land use, impacts on property values, and other local impacts.

Community benefit agreements can help ensure that communities hosting large electricity infrastructure receive meaningful, long-term benefits proportional to the scale of the investment and impact of the facility on the community and electrical grid. They should complement—not substitute for—strong protections against electricity cost shifting. These agreements can also be viewed as an additional way to help offset some of the indirect electricity cost impacts and cost risks of a project that are more difficult to fully account for through existing regulatory and policy mechanisms.

What “Good” Looks Like

Data centers should meaningfully engage with host communities to provide ongoing benefits that are significant relative to the data center investment. Strong community benefit agreements:

- Are negotiated with meaningful community participation.
- Provide legally enforceable commitments.
- Include recurring investments.
- Align with the scale of the project.
- Complement—rather than replace—strong electricity affordability protections.

Key Evaluation Questions

- How large are the commitments relative to the overall investment?
- Are the community benefits meaningful relative to potential cost impacts from electricity or other local impacts?
- Is there a legally enforceable community benefits agreement?
- Were community organizations involved in developing it?
- Are benefits recurring or one-time?
- Are commitments legally enforceable?

⁶⁹Ingram, E.C., “Direct testimony of Elizabeth C. Ingram on behalf of Entergy Louisiana, LLC” (public redacted version), *Louisiana Public Service Commission*, March 2026,

<https://lpscpubvalence.lpsc.louisiana.gov/portal/PSC/ViewFile?fileId=X2hQ%2FQMZBqA%3D>.

⁷⁰See exhibit LKB-2: Beauchamp, L.K. “Direct testimony of Laura K. Beauchamp on behalf of Entergy Louisiana, LLC” (public redacted version), *Louisiana Public Service Commission*, March 2026, <https://lpscpubvalence.lpsc.louisiana.gov/portal/PSC/ViewFile?fileId=kt5JixLAYFY%3D>.

- Does the agreement include workforce development, education, or infrastructure investments?

Case Study

A data center developer planned a 120-megawatt facility within a historical building in downtown St. Louis. After a series of community town halls where residents raised environmental and social concerns, the proposal increased to a \$3 billion project, the historical building would be renovated into new office space, and the data center would occupy adjacent lots.⁷¹ In April, the St. Louis Board of Public Service approved a conditional use permit for the data center facility that contained legally binding language addressing community concerns, including an estimated \$15 million in support for a city infrastructure fund, an agreement not to seek any tax abatement, damage payments if tax revenues do not meet forecasted estimates, minimum job levels plus damages if not met.⁷² This community benefits agreement is in addition to requirements for service under the local utility's large-load tariff.⁷³ The direct investment in the infrastructure fund is small relative to the size of data center investment (\$15 million vs. \$3 billion, or 0.5 percent), but with no tax abatement the 10-year projected tax revenues are estimated at \$432 million, or 15 percent.

⁷¹Schmid, E., "New plan for Armory includes \$3B tech hub and data center," *St. Louis Public Radio*, January 16, 2026, <https://www.stlpr.org/news-briefs/2026-01-16/new-plan-armory-3b-tech-hub-data-center>.

⁷²"City of St. Louis Approves Permit for Data Center Project, Announces Significant Conditions and Community Benefit Framework," *City of St. Louis*, April 21, 2026, <https://www.stlouis-mo.gov/government/departments/mayor/news/data-center-permit-approved.cfm>.

⁷³"Utility Tariffs for Large Load Customers in Missouri," *Missouri Public Service Commission*, https://psc.mo.gov/General/Utility_Tariffs_for_Large_Load_Customers.

5. Conclusions

The U.S. has entered a new era of electricity demand. AI-driven data center growth will require unprecedented investments in generation, transmission, and other grid infrastructure over the coming decade. Whether those investments increase or decrease electricity costs for American households will depend not on the existence of data centers themselves but on how those projects and their demands from the grid are planned, financed, and regulated.

Throughout this report, Consumer Reports has argued that asking whether data centers “pay their own way” is an important starting point—but not a sufficient one. Protecting consumers requires understanding the many pathways through which costs can be shifted. It also requires recognizing that many cost impacts occur outside the boundaries of any single utility proceeding or project approval.

For that reason, this report proposes a practical evaluation framework rather than a policy prescription. No individual tariff, procurement strategy, or contractual provision will eliminate every risk. Instead, policymakers, utilities, developers, and consumer advocates should evaluate each project holistically.

Consumer Reports believes the strongest data center agreements should meet three conditions:

1. **They should ensure that residential customers do not subsidize or bear cost impacts of the infrastructure needed to serve new large loads.** Projects should recover the full incremental costs they create, appropriately manage long-term financial risks, and avoid impacting costs through indirect market mechanisms whenever reasonably possible.
2. **They should strengthen the electricity system for all ratepayers.** Projects that improve utilization of existing infrastructure, provide operational flexibility, support new clean generation, and accelerate deployment of innovative grid solutions can reduce costs and improve reliability for all customers.
3. **They should create lasting value for the communities that host them.** Large data center developments should generate significant net benefits for the communities they choose to become a part of through local investment, workforce development, community partnerships, and long-term economic opportunity.

The transition to an AI-enabled economy presents both significant risks and significant opportunities. If poorly designed, data center development could contribute to higher electricity prices and place additional financial burdens on households already struggling with rising utility bills. If thoughtfully designed, however, these same investments can modernize the electric grid, improve system utilization, accelerate clean energy deployment, stimulate innovation, strengthen local communities, and support a more affordable, reliable, and resilient electricity system.

Getting there will require more than voluntary commitments or broad principles. It will require transparent agreements, rigorous evaluation, and regulatory frameworks capable of distinguishing projects that merely promise to protect ratepayers from those that demonstrably do.

That is the purpose of this framework. Consumer Reports hopes it serves as a practical resource for policymakers, utilities, consumer advocates, technology companies, and communities working together to ensure that the next generation of electricity infrastructure benefits not only the companies building it, but also the millions of consumers who ultimately help support and depend on the nation’s electric grid.