

Data Centers Bi-Weekly Update

July 28, 2026



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Climate Solutions

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Emerging Themes

Investments & Market Activity

AI investment remains high in short-term, but may start to moderate in future years

- UBS projects hyperscaler capex growth will slow to 25% in 2027 and 6% in 2028
- Alphabet again beat revenue expectations in Q2 and boosted 2026 infrastructure spending plans
- OpenAI reportedly exploring US government equity stake and public wealth fund

Energy demand growth fuels continued infrastructure investment and consolidation

- PJM's capacity auction again hit the price cap, highlighting continued supply & demand imbalance in power markets
- Private equity and infrastructure investors continue acquiring energy and AI infrastructure assets at scale

Research & Technology

Energy costs and emissions impacts are more visible

- Environmental Integrity Project report finds planned behind-the-meter data center gas plants could emit more GHGs than Australia
- Cost to build all new energy goes up, but renewables win on cost despite policy headwinds
- Residential electricity prices increased an average of 7.3% in the past year nationwide

Emerging tech challenges existing energy models

- DOE SMR pilot reaches key milestone, but scaling remains a major hurdle
- NVIDIA's new data center design runs hotter, reducing energy and cooling needs
- Distributed residential pilots offer alternative to large centralized data centers

Legislation & Policy

Federal policymakers intervene on data center growth and energy impacts

- The President's voluntary Ratepayer Protection Pledge expands to 200+ signatories
- DOE permits PJM to curtail data centers during a heatwave for grid reliability
- NRC continues efforts to streamline nuclear licensing requirements

State actions on data center regulation continue to expand

- NY becomes first state to pass data center moratorium
- MI governor outlines principles in voluntary data center accountability pledge
- PA expands its role in data center oversight
- WI's DNR faces litigation over environmental review requirements for Port Washington data center

Sustainability

Data center expansion is affecting climate commitments

- Microsoft reports 25% increase in annual GHG emissions
- Google reports 18% increase in annual GHG emissions
- Amazon reports 16% increase in annual GHG emissions
- Meta exits RE100 initiative amid reliance on data center gas projects

Data center growth is driving regulatory and market reforms

- PJM proposes September backstop auction after missing reliability targets and reaching price cap
- Former FERC officials and legal experts warn of increasing political influence over independent agencies
- Saline Township, MI grants data center tax breaks, citing legal risks

Investments & Market Activity

Article/Link

[Investors Brace for Slower AI Spending Growth in Future Years](#)

[Alphabet Beats Expectations for Q2 Revenue, Raises AI Spending](#)

[OpenAI Proposes 5% US Government Stake](#)

[PJM Capacity Prices Hit Cap Again](#)

Summary

7/17/2026 (National): Some investors are reducing exposure to AI chipmakers and infrastructure companies as they expect spending growth from hyperscalers such as Microsoft, Amazon, Alphabet, and Meta to moderate over the next several years. Global wealth manager [UBS](#) estimates hyperscaler capital expenditures will rise 76% to \$673 billion in 2026 but slow to 25% growth in 2027 and just 6% in 2028, raising concerns that semiconductor valuations may have outpaced future demand growth. In response, some portfolio managers are rotating into hyperscalers themselves, software companies, cybersecurity firms, and other sectors expected to benefit from AI adoption rather than AI infrastructure buildouts.

7/22/2026 (National): Alphabet reported Q2 2026 revenue of \$119.8 billion, ahead of expectations, driven by an 82% year-over-year surge in Google Cloud revenue as AI demand continued to accelerate. The company also highlighted strong AI adoption, with Gemini reaching 950 million monthly active users and its Antigravity coding tool surpassing 2.4 million weekly active users. However, shares fell after hours after Alphabet increased its 2026 capital expenditure forecast to as much as \$205 billion, reflecting massive ongoing investments in AI infrastructure and data centers. The company also disclosed that gains from investments including Anthropic and SpaceX contributed \$99 billion in "other income."

7/2/2026 (National): According to a recent Financial Times report, OpenAI CEO Sam Altman has been in talks with the Trump Administration since early 2025 about a proposal for the U.S. government to take a 5% stake in OpenAI as a way to share AI-driven economic gains with the public and ease political scrutiny. The concept reportedly includes a broader framework under which the government could hold stakes in other leading AI companies, such as Anthropic, Google, and Meta, through a sovereign wealth fund-style vehicle. The idea builds on the Trump administration's recent practice of taking equity stakes in strategic technology companies, including a 10% ownership stake in Intel, as well as investments in IBM and other critical technology sectors. Read OpenAI's recent white paper which addresses the public wealth fund [here](#).

7/14/2026 (National): PJM Interconnection, which operates the largest U.S. power grid across 13 states, holds capacity auctions that pay generators to commit power supplies several years in advance to ensure reliability during periods of peak demand. In the latest auction for the 2028-2029 delivery year, the clearing price again hit the \$325/MW-day cap that was established after record auction prices in 2024 and later extended through a [Statement of Principles](#) supported by PJM, a coalition of governors, and the Trump administration to limit consumer impacts while supply shortages persist. PJM said demand growth from data centers, electrification, and other large loads continues to outpace new generation additions, and the auction fell nearly 6,900 MW short of its target capacity level, underscoring ongoing concerns about reliability and affordability across the region.

Potential Impact

High – Even if AI spending remains high, a slower pace of growth could shift investor gains from chipmakers toward hyperscalers and AI-enabled software companies.

High – Google's results reinforce that cloud and AI are driving growth, but investors remain focused on whether the enormous spending will generate sufficient long-term returns.

High – Government ownership stakes in AI firms raises concerns about political intervention in private markets, but supporters say it could help the public share in AI's economic gains.

High – Surging electricity demand, particularly from data centers, is keeping PJM power prices at their ceiling and increasing pressure to add new generation and transmission infrastructure.

Investments & Market Activity (Continued)

Article/Link

Summary

Potential Impact

AI Demand
Fuels Wave of
Private Equity
Deals Across
US Power
Infrastructure

6/26/2026 (National): Shareholders for [AES Corporation](#), the parent company of [AES Indiana](#) and [AES Ohio](#), approved the company's previously announced acquisition by a consortium of investors led by [Global Infrastructure Partners](#) (subsidiary of [BlackRock](#)) and [EQT Group](#), along with co-underwrites [California Public Employees' Retirement System](#) and [Qatar Investment Authority](#). The \$10.7 billion equity deal would take AES private and provide additional capital to support utility, renewable energy, and critical power infrastructure growth. Read the full article [here](#).

6/30/2026 (National): Fuel cell manufacturer [Bloom Energy](#) and investment firm [Brookfield Corporation](#) expanded their existing AI infrastructure power financing partnership from \$5 billion to \$25 billion. The expanded partnership is part of Brookfield's dedicated [AI Infrastructure Fund](#), which launched in November 2025 with a target to deploy \$100 billion. Read the full article [here](#).

7/1/2026 (National): Global investment firm [KKR](#) agreed to acquire renewable energy firm [EDF North America's](#) U.S. and Canadian renewable energy operations for \$4.2 billion, marking its largest renewable energy investment to date. The deal includes a large portfolio of solar, wind, and battery storage assets and is aimed at meeting rising electricity demand from data centers, electrification, and manufacturing growth. Read the full article [here](#).

7/10/2026 (National): Global investment firm [EQT Group](#) acquired [Copia Power](#) from [The Carlyle Group](#), gaining a platform that develops integrated energy and AI infrastructure campuses combining power generation, transmission, and data center capacity. Copia currently has more than 2.6 GW operational or under-construction assets and a large pipeline of power and data center projects designed to address AI's growing energy needs. Read the full article [here](#).

7/18/2026 (National): Investment firms [Industrial Development Funding](#) (IDF) and [Oaktree Capital](#) announced a \$1.7 billion investment to deploy Bloom Energy's fuel cell technology, providing dedicated electricity for cloud infrastructure company [Nebius's AI's](#) computing operations. The funding will support behind-the-meter power generation, allowing Nebius to meet growing demand for AI compute capacity directly. Read the full article [here](#).

High – These transactions highlight a broad consolidation of energy infrastructure ownership where utilities, renewable generation assets, and AI-linked power platforms are increasingly moving from public markets into the hands of large private equity, infrastructure, and sovereign wealth investors, including globally headquartered firms.

This shift could provide access to significant capital for new energy development, but it also concentrates ownership of critical electricity infrastructure among a smaller group of private financial institutions with growing influence over the future of power supply.

Research & Technology

Article/Link

Summary

Potential Impact

[Report Details
Potential
Impacts of 74
Gas Plants
Planned for
Data Centers](#)

7/1/2026 (National): A new report by the nonprofit [Environmental Integrity Project](#) (EIP) identifies at least 74 proposed natural gas power plants designed specifically to serve data centers. If built, these behind-the-meter facilities would generate enough electricity to power California nearly three times over and produce annual greenhouse gas emissions comparable to the entire nation of Australia, or roughly 140 million cars and trucks operating for a year. The plants could also release significant amounts of health-harming pollutants, including smog-forming nitrogen oxides and fine particulate matter linked to lung, heart, and asthma-related illnesses. EIP found that 40% of residents living within three miles of the proposed plants are low-income, while 88% of projects with known locations are planned in counties where life expectancy is already below the national average. The report's analysis is limited to proposed behind-the-meter gas plants and does not include grid-connected generation projects or data centers' onsite backup generators. Read the full report [here](#).

High – This report shows how data center-driven gas plant buildouts could increase both climate-warming emissions and harmful air pollution, with disproportionate impacts on nearby lower-income communities.

[Renewables
Keep Cost
Edge Despite
Rising Costs](#)

7/16/2026 (National): Financial advisory firm [Lazard](#) released its 2026 Levelized Cost of Energy (LCOE+) report, which found that utility-scale solar and onshore wind remain the cheapest sources of new-build electricity in the U.S., even as costs have increased across all generation technologies. Rising capital costs, higher interest rates, tariff impacts, and supply chain repricing have pushed renewable project costs higher, but despite these pressures, renewables remain more cost-competitive than most new gas, coal, and nuclear generation options, while growing electricity demand continues to drive interest in new gas capacity. Read the full report [here](#).

High – Renewables remain the lowest-cost option for new power generation, even as rising costs narrow their advantage.

[Report Details
State Action on
Energy
Affordability](#)

7/7/2026 (National): According to a new report from the [North Carolina Clean Energy Technology Center](#), the national average price of residential electricity rose about 7.3% from April 2025 to April 2026 reaching 18.8 cents per kWh, deepening an affordability crisis despite growing government intervention. The report details 362 actions that have been taken among 46 states, the District of Columbia, and Puerto Rico on energy affordability, ranging from customer bill assistance and low-income programs to utility business model reforms, utility oversight enhancements, and policies aimed at preventing existing customers from subsidizing large new loads such as data centers. The report noted that while large loads like data centers can raise demand and require new infrastructure, some evidence suggests certain large loads can actually put downward pressure on rates in some markets. Download the full report [here](#).

High – Energy affordability is rapidly becoming a major policy issue in the U.S., with states increasingly focusing on rate relief, cost allocation, and utility reform as electricity demand and customer bills continue to rise.

[DOE Hits Small
Nuclear
Milestone](#)

7/1/2026 (National): The Trump administration met its self-imposed July 4 goal after three advanced nuclear reactors reached criticality through Department of Energy programs, marking an important step in efforts to accelerate small modular reactor (SMR) and microreactor development. The administration sees advanced nuclear as a key solution for surging electricity demand, particularly from AI data centers, and has set a goal of quadrupling U.S. nuclear capacity by 2050. However, experts caution that significant hurdles remain before these technologies can be deployed at scale, including licensing, financing, fuel supply, manufacturing capacity, and commercial project execution. Even with recent progress, it could be years before SMRs contribute meaningful amounts of electricity to the grid.

Medium – While advanced small reactor development has accelerated, major hurdles remain before they can be deployed at scale and materially contribute to U.S. power supply.

Research & Technology (Continued)

Article/Link

[NVIDIA is Designing Data Centers to Run Hotter and Use Far Less Water](#)

[Sunrun Tests Home Solar and Batteries as a Distributed Data Center](#)

Summary

7/21/2026 (National): Nvidia's latest AI data center reference design, the [DSX AI platform](#), uses a closed-loop, 100% liquid-cooling system that operates with coolant temperatures of up to 45°C (113°F), much warmer than traditional cooling systems. By running hotter, the system can dissipate heat through dry coolers instead of energy-intensive chillers and water-consuming cooling towers, potentially reducing onsite water use to nearly zero while lowering cooling-related energy consumption. The design is part of Nvidia's Rubin-generation AI infrastructure and reflects a broader industry push to address growing concerns about the environmental footprint of AI data centers.

7/15/2026 (National): Residential solar and battery provider [Sunrun](#) is expanding a pilot that places AI computing hardware in homes equipped with its solar and battery systems, creating a distributed network of compute nodes that can process AI inference workloads. The company says the model could help meet growing AI demand faster than traditional data centers, which often face lengthy permitting, construction, and grid interconnection delays. Sunrun plans to leverage its base of more than 1.1 million solar and battery customers, compensating participating homeowners while selling computing capacity to enterprise customers. The company argues the approach could improve utilization of existing grid infrastructure and reduce reliance on large, centralized data centers. Sunrun's announcement comes about three months after [SPAN](#), an electrical hardware startup, unveiled its own [distributed compute initiative](#) in partnership with NVIDIA.

Potential Impact

Medium – Advanced liquid-cooling technologies could significantly reduce the water and energy footprint of data centers, though they do not address the emissions associated with powering those facilities.

Medium – Sunrun's pilot could turn home energy systems into decentralized AI infrastructure, creating new revenue streams for homeowners and energy companies alike.

Legislation & Policy

Article/Link

[Trump's Ratepayer Protection Pledge Expands](#)

[PJM Switched Data Centers to Diesel During Heat Wave](#)

[NRC Moves to Streamline Nuclear Development](#)

[New York Passes First Statewide Data Center Moratorium](#)

[Michigan's Data Center Accountability Pledge](#)

Summary

7/24/2026 (National): The Trump administration expanded its voluntary Ratepayer Protection Pledge, adding more than 200 signatories, including major utilities and data center operators. The pledge seeks to prevent residential customers from bearing the costs of new power generation and grid infrastructure needed for growing AI and data center demand by requiring participants to fund related energy and transmission investments and support grid reliability. Utilities representing roughly 80% of U.S. households and 23 governors have joined the initiative.

6/30/2026 (PJM Region): The U.S. Department of Energy authorized PJM Interconnection to require data centers and other large customers to use backup generators, batteries, and other onsite resources during a severe heat wave to help avoid grid outages. The emergency order ran through July 3, and allowed certain power plants to operate beyond normal pollution limits if needed to maintain grid reliability as demand approaches record levels. AI data centers were specifically included due to their growing impact on electricity demand across the PJM region.

7/2/2026 (National): The Nuclear Regulatory Commission has proposed regulatory changes aimed at accelerating reactor licensing and construction, including more flexible, risk-informed safety reviews and allowing certain site activities before full construction approval. The agency is also seeking to replace the decades-old ALARA ("as low as reasonably achievable") radiation standard with a risk-based approach, arguing the current framework creates costs and complexity without measurable safety benefits. The reforms are part of broader federal efforts to support advanced nuclear technologies and expand U.S. nuclear generation capacity.

7/14/2026 (NY): New York Gov. Kathy Hochul imposed a one-year moratorium through [executive order](#) on new hyperscale data centers with loads of 50 MW or more while the state develops a regulatory framework to assess their impacts on energy demand, water use, the environment, infrastructure, and local communities. The move follows separate legislation passed by the state legislature that would also establish a one-year moratorium and require a comprehensive environmental impact study, though that bill had not yet been signed into law at the time of the announcement. State officials cited concerns about rising electricity demand, utility costs, and resource consumption tied to AI-driven data center growth.

7/15/2026 (MI): Michigan Gov. Gretchen Whitmer launched the Michigan Affordable and Responsible Growth Action Plan, calling on data center companies to sign a voluntary pledge committing to cover the full costs of their energy, water, and infrastructure needs rather than shifting costs to ratepayers. The plan also urges the state legislature to codify existing Michigan Public Service Commission protections requiring large-load customers to meet obligations such as minimum contract terms, financial assurances, and grid upgrade cost recovery. The pledge includes commitments related to grid reliability, environmental compliance, water stewardship, local job creation, transparency, and support for new power resources needed to serve growing data center demand.

Potential Impact

High – Because the pledge is voluntary, its impact will depend on whether participants follow through on their commitments.

Medium – This order shows how massive electricity demand from data centers are driving tradeoffs between grid reliability and environmental protection.

Medium – If finalized, the changes could lower regulatory barriers and shorten development timelines for new nuclear projects.

Medium – The move could set a precedent for other states to more closely scrutinize large data center projects and their impact on power systems, natural resources, and ratepayers.

Medium – Though the pledge remains voluntary until new provisions are passed into law, Michigan is positioning itself for data center growth while protecting ratepayers and the environment.

Legislation & Policy (Continued)

Article/Link

[Pennsylvania Expands Data Center Oversight](#)

[WI DNR Sued for Permitting Data Center Without Full Environmental Impact Review](#)

Summary

7/14/2026 (PA): Pennsylvania Gov. Josh Shapiro signed a state budget provision requiring data centers to annually report their electricity and water usage, projected energy demand, and efforts to reduce grid and environmental impacts. The law also gives the Pennsylvania Public Utility Commission greater oversight of utility load forecasts submitted to PJM, responding to concerns about transparency and the accuracy of demand projections tied to large-load customers. Data centers that fail to comply face fines of \$10,000 per day, and the state will publish annual reports on industry energy and water consumption trends.

7/10/2026 (WI): Environmental groups [Sierra Club Wisconsin](#) and [Midwest Environmental Advocates](#) have [sued](#) the Wisconsin Department of Natural Resources, arguing the agency improperly approved permits for Vantage Data Centers' \$15 billion Port Washington campus without completing a full Environmental Impact Statement (EIS). The lawsuit cites internal emails indicating DNR staff initially planned to require an EIS before reversing course, allegedly after concerns were raised that the requirement could jeopardize the project. The proposed campus could eventually require up to 3.5 GW of electricity and has drawn concerns over water use, emissions, wetlands impacts, and broader infrastructure needs.

Potential Impact

Medium – The law gives Pennsylvania greater oversight of utility load forecasts submitted to PJM, reflecting states' efforts to play a larger role in regional grid planning as data center demand grows.

Medium – The lawsuit highlights growing legal and regulatory scrutiny of hyperscale data centers as communities and environmental groups push for more comprehensive reviews of their impacts.

Sustainability

Article/Link

Summary

Potential Impact

7/13/2026 (National): Microsoft reported a 25% increase in greenhouse gas emissions in its [2026 Environmental Sustainability Report](#), driven largely by rapid AI and data center expansion. The company also attributed the increase to its decision to stop relying on certain renewable energy certificates and instead prioritize investments in new carbon-free energy resources, a shift that raises reported emissions in the short term. Despite the increase, Microsoft said it remains committed to its goals of becoming carbon negative, water positive, and zero waste by 2030, while expanding its renewable energy portfolio from 34 GW to 40 GW. Read the full article [here](#).

6/30/2026 (National): Google reported an 18% increase in greenhouse gas emissions increased in its [2026 Environmental Report](#), the company's largest annual increase to date, driven largely by the rapid buildout of AI infrastructure and the manufacturing of related hardware. Electricity demand rose 37%, while water consumption increased 34% to 10.9 billion gallons, despite ongoing improvements in data center efficiency. Google also signed a record 12 GW of clean energy agreements and said it remains committed to its sustainability goals but acknowledged that AI growth is significantly increasing demand for energy, water, and other resources. Read the full article [here](#).

7/1/2026 (National): Amazon reported a 16% increase in greenhouse gas emissions in 2025 in its most recent [Sustainability Report](#), bringing its carbon footprint 58% above its 2019 baseline despite maintaining its net-zero-by-2040 commitment. The increase was driven largely by data center and building construction, with emissions from purchased electricity rising 34% as Amazon expanded cloud and AI infrastructure. The company said it remains committed to its long-term climate goals and has contracted more than 42 GW of carbon-free energy capacity across over 700 projects worldwide. Read the full article [here](#).

7/23/2026 (National): Meta has left [RE100](#), a major corporate renewable energy initiative, after a decade of membership as the company expands its use of natural gas to power AI-driven data center growth. Over the past year, Meta has backed at least a dozen natural gas power plants, including 10 projects tied to its [Hyperion data center campus](#) in Louisiana with a combined capacity of 7.5 GW. Meta said its departure from RE100 was mutual and maintains that it remains committed to matching its electricity consumption with 100% clean and renewable energy. Read the full article [here](#).

High – This pattern shows that even companies with the most publicized climate commitments are struggling to meet them with the rising energy demands of AI and data centers, in some cases driving innovation to more efficiently use resources and scaling clean energy purchasing, while in other cases major corporations are scrapping these goals altogether. Even aggressive clean energy purchasing and efficiency gains aren't fully offsetting the emissions surge from data center construction and power use, showing the scale of this challenge.

AI
Infrastructure
Expansion
Challenges Big
Tech Climate
Goals

Other Industry News

Article/Link

[PJM Proposes Special Procurement for Data Center Demand](#)

[FERC Independence Faces New Questions](#)

[World's Largest Data Center Campus Scrapped](#)

[Saline Township, MI Reverses Data Center Tax Break Vote](#)

Summary

7/17/2026 (National): PJM's latest capacity auction again highlighted shortcomings in its traditional market design, with capacity prices hitting the market cap for a third consecutive auction while still falling 6.8 GW short of reliability needs. In response, PJM stakeholders approved a proposed Reliability Backstop Procurement (RBP), a one-time procurement mechanism that would allow new large loads, particularly data centers, to directly support the development of new generation, storage, and other capacity resources through long-term contracts rather than relying solely on the broader capacity market. The proposal also contemplates leveraging demand-side resources, such as demand response, virtual power plants, and flexible load reductions, as part of the solution set for serving new load growth. The proposal is pending review and approval by PJM's Board and FERC, with a potential RBP scheduled for September.

7/10/2026 (National): In [Trump v. Slaughter](#), the Supreme Court ruled 6-3 that the president can remove Federal Trade Commission commissioners without cause, significantly expanding presidential authority over officials at independent regulatory agencies. Legal experts and former FERC commissioners say the decision could also apply to FERC, potentially allowing presidents to remove commissioners at will and reducing the agency's traditional independence. Former commissioners warned that the ruling could increase political influence over electricity and natural gas market regulation, create uncertainty for long-term infrastructure investments, and even risk leaving FERC without a quorum if commissioners are removed.

7/4/2026 (National): Blackstone-owned QTS Realty Trust has officially abandoned the [Prince William Digital Gateway](#) project in Virginia, ending a three-year legal battle over what would have been the world's largest data center campus. The proposed development spanned 2,100 acres, included 37 data center buildings and 22 million square feet of space, and carried an estimated \$100 billion price tag. The project was derailed after a Virginia court invalidated the county's rezoning approval due to deficiencies in the public notice process, prompting both developers and local officials to withdraw their appeals.

7/18/2026 (National): Saline Township officials reversed an earlier vote that would have limited a tax abatement for Oracle and OpenAI's planned hyperscale data center to its original \$4.8 billion project valuation. After receiving legal advice that the cap violated both a 2025 [court settlement](#) and Michigan's [Industrial Facilities Exemption Act](#), the township approved Oracle's original request for a 12-year, 50% tax break tied to the project's current estimated value of \$43 billion. The decision sparked significant community opposition, with residents and local officials questioning the scale of incentives being offered to one of the world's largest proposed AI data center developments.

Potential Impact

High – The proposal reflects a growing recognition that demand-side resources, not just new generation, will be needed to support rising data center demand and maintain grid reliability.

High – The ruling could make FERC decisions more vulnerable to political change, raising concerns about regulatory certainty for energy markets and infrastructure investment.

Medium – The project's collapse underscores how community opposition, environmental concerns, and permitting challenges are major barriers to large-scale data center development.

Medium – The reversal highlights the tension between local opposition to large data center incentives and the legal agreements and state policies that can limit a community's ability to negotiate or reject them.

Thank You

Let's make bold changes together

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