

Data Centers Bi-Weekly Update

October 6, 2026



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COAST**
Climate Solutions

Bold Solutions. Transformative Action.

Emerging Themes

Investments & Market Activity

Data center execution risks continue to rise and shape investment decisions

- Oracle moved to protect its position in NM-based “Project Jupiter” amid delay concerns, sending ripples through investment markets
- Independent analysts suggest the Port Washington, WI project faces timeline risks due to regulatory approvals and grid upgrade requirements

Data center investment strategies face growing investor scrutiny

- Anthropic IPO prospectus highlights a widening revenue-cost gap and sustained spending needs
- Nvidia’s chip-backed financing model is drawing investor examination

Research & Technology

Next-gen energy solutions are gaining momentum across the power sector

- Fervo begins operating first utility-scale enhanced geothermal system in UT
- Sunrun and Tesla set record with largest VPP-grid event during September heatwave
- Solid-state transformers advance toward commercial data center applications to manage load volatility
- Variable frequency drive deployment could free-up grid capacity and provide customer savings
- Data center developer signs long-term deal for space-based solar power
- Google launches test satellite for orbital data center R&D
- MI invests in geologic hydrogen exploration efforts

Legislation & Policy

Federal and state policymakers are reshaping energy regulations to accommodate rising data center demand

- Senate blocks Ratepayer Protection Act amid concerns it lacked stronger protections
- Bipartisan Senate bill seeks to accelerate grid infrastructure permitting
- Expanded federal tax incentives for rural data centers take effect next year
- Efforts to measure and optimize grid utilization gain traction at the state level
- NRC unveils sweeping proposal to further modernize nuclear licensing
- FERC delays PJM backstop auction to reassess cost allocation and load forecasts

Sustainability

New tools, metrics, and frameworks are emerging to measure and manage AI sustainability

- Trellis compiles tools to measure and compare AI emissions, water risks, etc.
- AWS launches Data Center Commitment focused on community impacts
- European Commission launches data center sustainability labeling framework

Community benefit concerns continue to evolve

- Google’s CA pilot VPP faces criticism over perceived gaps in customer protections
- PA project suggests \$10k payments may not secure community support
- Google’s MI data center clears regulatory hurdles amid community debate

Investments & Market Activity

Article/Link

[Data Center Growth Meets Real World Constraints](#)

[Oracle Data Center Delay Sends Signals Through AI Financing Markets](#)

[Anthropic's IPO Prospectus Showcases AI's Capital Demands](#)

[Nvidia's Financing Plan Faces Scrutiny](#)

[Wisconsin Grid Delays Threaten Data Center Launch](#)

Summary

9/29/2026 (National): U.S. data center development remains strong, with utilities and industry forecasts projecting substantial electricity demand growth, but projects are increasingly encountering delays from equipment shortages, labor constraints, permitting hurdles, and community opposition. Recent setbacks involving projects backed by Microsoft, Google, and Oracle highlight how challenges related to power supply, environmental reviews, and local concerns are complicating development timelines. Notably, Goldman Sachs estimates that only 50% to 60% of planned data center capacity is likely to come online as scheduled over the next two years, suggesting a significant share of announced projects could be delayed or canceled.

9/24/2026 (National): Oracle issued a force majeure notice tied to [Project Jupiter](#), a massive OpenAI-related data center campus being developed in New Mexico by Blue Owl's STACK Infrastructure unit, as the project faces power-related delays and is reportedly running about a year behind schedule. The move does not change the companies' commitment to the project, but it has intensified investor scrutiny of AI infrastructure deals and highlighted growing concerns over how project risks are allocated when permitting, power supply, or infrastructure setbacks occur. Bankers and investors told Reuters that the situation is already affecting discussions around other AI data center financings, as lenders become more cautious despite continued expectations for strong AI-driven demand. Read more about Project Jupiter's setbacks [here](#).

9/28/2026 (National): Anthropic's IPO prospectus outlines a vision in which AI reshapes the global economy on a scale greater than industrialization, electricity, or the internet, while exposing the enormous costs required to pursue that goal. The company reported a \$42 billion net loss in 2025, plans to spend \$518 billion on cloud, computing, and infrastructure commitments in the coming years, and saw compute and infrastructure expenses triple year-over-year, even as revenue grew twelvefold to nearly \$4.6 billion. The filing also highlights safety concerns associated with increasingly capable AI models and could establish a benchmark for how public markets value leading AI companies.

10/1/2026 (National): Nvidia's proposed [\\$500 billion financing initiative](#), which would use AI chips as collateral to help fund data center and AI infrastructure buildouts, is facing skepticism from banks and investors. Lenders are reportedly seeking stronger guarantees, questioning whether advanced AI chips can retain their value and generate revenue long enough to support the long-term financing structures envisioned by Nvidia. The debate highlights a growing disconnect between the AI industry's expectations for future demand and investors' more conservative approach to assessing risk and asset value.

10/1/2026 (WI): Oracle's Port Washington data center campus, developed by Vantage, dubbed, "[the Lighthouse](#)," faces potential delays as transmission infrastructure needed to power the site awaits regulatory approval. While construction of the campus is progressing and permits are in place, the project cannot operate until American Transmission Company (ATC) secures approval from the Public Service Commission of Wisconsin (PSC) and completes a new high-voltage grid interconnection. Analysts at [Aterio](#) estimate that meaningful power delivery is more likely in 2028 than Oracle's targeted second-half 2027 timeframe after the approval process was effectively reset this fall.

Potential Impact

High – While data center demand continues to drive unprecedented investment, mounting constraints are making project timelines less certain and raising questions about economic risks.

High – The project's setbacks demonstrate that strong AI demand alone may no longer be enough to secure financing without clearer pathways to power, permits, and project delivery.

High – The prospectus highlights the scale of infrastructure spending required to compete at the frontier of AI development.

High – As AI infrastructure costs soar, investors are demanding greater assurance that today's computing assets will retain value over time.

Medium – The project underscores how data center timelines depend on synchronized construction, grid investment, and regulatory approvals.

Research & Technology

Article/Link

[Next-Gen Geothermal Reaches Utility Scale](#)

[VFDs Could Unlock Grid Capacity](#)

[Home Batteries Showcase Grid Potential](#)

[Solid State Transformers Gain Momentum](#)

[Google Tests AI in Space](#)

Summary

9/28/2026 (UT): [Fervo Energy](#) has begun commercial operations at the first 33-MW unit of its [Cape Station](#) enhanced geothermal project in Utah, marking the world's first utility-scale deployment of next-generation geothermal technology. The project uses engineered geothermal reservoirs created with oil and gas drilling techniques and will ultimately grow to 500 MW, with power being supplied to Shell Energy and additional capacity supported by a power agreement with Google. Fervo is positioning the resource as a source of 24/7 carbon-free electricity for growing grid demand, including power-hungry AI and data center development.

10/5/2026 (National): A growing coalition led by the National Electrical Manufacturers Association (NEMA), equipment manufacturers, and energy experts is advocating for broader deployment of variable frequency drives (VFDs), which improve the efficiency of electric motors used in HVAC systems, pumps, fans, and industrial processes. Despite motors accounting for nearly one-third of U.S. electricity demand, VFD adoption remains low, with just 16% of industrial motor systems and 4% of commercial motors using the technology. Because VFDs can reduce motor energy use by roughly 40-60%, advocates argue wider deployment could free up gigawatts of grid capacity by eliminating wasted electricity.

9/21/2026 (CA): In a press release, [Sunrun](#) and [Tesla](#) announced that more than 140,000 residential batteries dispatched 580 MW to California's grid during a September heat wave, marking the largest distributed power plant event on record and providing enough capacity to power all households in Sacramento County during peak hours. The three-hour event drew on 110,000 Tesla Powerwalls and more than 30,000 additional batteries, demonstrating how aggregated residential energy resources can operate at the scale of multiple peaker plants. Sunrun says the event demonstrates how distributed energy resources can ease grid constraints and support load growth from AI and data centers.

9/28/2026 (National): After years of limited commercial adoption, [solid-state transformers \(SSTs\)](#) may be finding an early market in AI infrastructure. Startups [DG Matrix](#) and [TerraFlow Energy](#) plan to deploy one of the first U.S. SST-powered high-performance computing pilots, pairing an SST with a [vanadium redox flow battery system](#) to power Dell servers and test performance under real AI workloads. Interest is growing as hyperscalers seek ways to manage data center power constraints, with analysts at Jefferies estimating the U.S. data center SST market could grow from \$37 million today to \$4.3 billion by 2030. See the press release for the pilot project [here](#).

10/1/2026 (National): Google has launched a refrigerator-sized satellite as part of [Project Suncatcher](#), a long-term effort to explore whether AI data centers could eventually operate in orbit using near-constant solar energy. The prototype carries four of Google's Tensor Processing Units (TPUs) and will test how AI chips perform under the radiation, thermal, and mechanical stresses of space. Developed with [Planet](#), the project reflects growing interest in alternatives to terrestrial data centers as AI-driven power demand, land constraints, and community opposition continue to mount.

Potential Impact

High – Fervo's Cape Station milestone suggests next-generation geothermal could become a key source of reliable, carbon-free power for data centers.

High – Widespread VFD adoption could help create grid headroom for data centers while reducing costs for commercial and industrial power users.

High – The dispatch illustrates how customer-owned energy assets can function as a grid resource, at a scale rivaling peaker plants.

Medium – If successful, the pilot could show how SSTs and flow batteries can smooth data center loads, improve grid utilization, and reduce infrastructure bottlenecks.

Medium – The launch highlights the search for long-term solutions that decouple AI compute growth from grid, land, and water constraints on Earth.

Research & Technology (Continued)

Article/Link

[Data Center
Bets on Space
Solar](#)

[Michigan Eyes
Geologic
Hydrogen](#)

Summary

9/30/2026 (MI & IL): [Virtus Solis Technologies](#) signed a 20-year power purchase agreement (PPA) with underwater data center developer [Brae Systems](#) for 100 MW of 24/7 power, with an option to expand to 250 MW. Under the concept, solar arrays would be placed in orbit where they receive near-continuous sunlight, convert that energy into radio waves, and beam it back to Earth, where ground-based receivers would convert it into electricity for data center use. While commercial operation is targeted for around 2030, the technology remains unproven at scale, with Virtus Solis still needing to deploy a pilot project and secure financing for its first commercial facility.

9/30/2026 (MI): Michigan is investing \$7.5 million to explore and develop geologic hydrogen, a naturally occurring form of hydrogen trapped underground in rock formations, similar to oil and gas reserves. The effort follows a [U.S. Geological Survey \(USGS\) assessment](#) that identified Michigan as the most promising state in the nation for geologic hydrogen potential, prompting the creation of the state's [Geologic Hydrogen Exploration and Preparedness Initiative](#). Supporters believe the resource, sometimes called "white hydrogen," could provide a low-carbon energy source, create a new industry, and strengthen domestic energy supplies if it can be economically recovered at scale.

Potential Impact

Medium – The deal illustrates how data center developers are creating demand signals for next-generation energy technologies years before commercial deployment.

Medium – If commercially viable, geologic hydrogen could emerge as a new source of firm, clean energy to support rising electricity demand.

Legislation & Policy

Article/Link

[Senate Blocks Ratepayer Protection Act](#)

9/30/2026 (National): The U.S. Senate blocked the [Ratepayer Protection Act](#) - legislation that would have required state utility regulators to consider whether large electricity users, including data centers, should bear the incremental costs of grid infrastructure built to serve them. The bill received bipartisan support and previously passed the U.S. House of Representatives by a 417-3 vote but fell short of the 60 votes needed to advance in the Senate. Democrats argued the measure was too weak because it only required states to consider cost-allocation changes, while supporters viewed it as an initial step toward protecting households from costs tied to AI-driven data center growth. Earlier this year, Senate Democrats introduced the [GRID Savings Act](#), which would take a different approach to cost allocation involving requirements from FERC rather than requiring consideration of guidelines at the state-level.

Potential Impact

High – The debate reflects growing urgency to address data center-related grid costs, but little consensus on a federal approach before major infrastructure decisions are made.

[Permitting Reform Gains Momentum](#)

10/1/2026 (National): A bipartisan group of senators has introduced the [Bipartisan American Affordability and Jobs Act](#), a permitting reform package that would expand the authority of the Federal Energy Regulatory Commission (FERC) to approve certain interstate transmission projects and strengthen protections for already-issued energy permits. The legislation builds on several previous permitting reform efforts that stalled in Congress and reflects growing concern that transmission and permitting delays are preventing the buildout of energy infrastructure needed to meet rising electricity demand. With lawmakers heading into the November midterm elections, supporters are optimistic the bill has its best chance yet, though final action is expected to wait until Congress reconvenes after the election.

High – Supporters see permitting reform as key to expanding transmission and clean energy infrastructure, while critics fear it could weaken environmental safeguards.

[Rural Data Centers Eye Tax Windfall](#)

10/4/2026 (National): A provision in the One Big Beautiful Bill Act (OBBA) is set to expand federal [Opportunity Zone tax benefits](#) to rural projects beginning in 2027, potentially making more than 100 planned or developing data centers eligible for significant tax incentives. The policy comes as data center development increasingly shifts to rural areas, with one analysis finding that while only 13% of operating data centers are rural today, roughly 67% of planned facilities are located in rural areas. Critics note that eligibility is based on capital investment rather than job creation, raising questions about whether the tax breaks will generate meaningful local economic benefits. Read a Reuters analysis on the changes to Opportunity Zone tax exemptions in the OBBA [here](#).

High – The incentives could boost rural data center development, but growing scrutiny of data center subsidies may make some developers reluctant to claim or disclose the benefits.

[States Turn to Grid Utilization](#)

10/1/2026 (National): As states look for ways to meet rising electricity demand without immediately building new infrastructure, policymakers are increasingly focused on grid utilization: how much of the existing grid is actually being used over time. Virginia, which recently enacted the nation's first grid utilization law ([HB 434 / SB 621](#)), is requiring utilities to develop metrics to measure unused grid capacity. Meanwhile, the [Utilize Coalition](#), whose members include Google and Tesla, has [proposed a framework](#) based on the relationship between delivered and deliverable energy. Proponents argue better measurement could help utilities identify underutilized grid capacity, defer costly upgrades, and make more efficient use of existing infrastructure.

High – As Virginia becomes the first state to require utilities to measure grid utilization, its approach could shape how other states assess grid headroom and plan for future load growth.

Legislation & Policy (Continued)

Article/Link

[NRC Proposes Nuclear Overhaul](#)

[FERC Orders Delay to PJM Data Center Plan](#)

Summary

9/30/2026 (National): The U.S. Nuclear Regulatory Commission (NRC) has proposed a sweeping new rule package aimed at accelerating nuclear deployment by reducing reporting requirements, eliminating expiration dates for standard reactor design approvals, increasing staffing flexibility, and modifying seismic and radiation-related requirements. The proposal is part of a broader regulatory reform effort launched after a 2025 [executive order](#) directing the NRC to modernize regulations and support a significant expansion of U.S. nuclear capacity. Supporters say the changes would lower costs and streamline permitting and licensing for both existing and advanced reactors, while some proposals, particularly around radiation standards, are expected to face scrutiny. Read the NRC's most recent proposal package [here](#).

9/30/2026 (National): The Federal Energy Regulatory Commission (FERC) directed PJM Interconnection to revise and delay a [proposed "backstop" power procurement program](#) designed to address a 6,800+ MW capacity shortfall driven largely by rapidly growing data center demand. While FERC approved many elements of the proposal, it paused implementation for five months, citing unresolved questions around cost allocation, including whether existing customers could be left subsidizing power procurement costs associated with new large loads such as data centers. The commission also called for better forecasting of data center demand, noting that many load requests remain speculative, making it difficult to determine how much infrastructure is actually needed and who should pay for it.

Potential Impact

High – The debate reflects growing urgency to address data center-related grid costs, but little consensus on a federal approach before major infrastructure decisions are made.

High – The case highlights the tension between rapidly securing new power supplies and ensuring consumers are protected from costs tied to uncertain data center growth projections.

Sustainability

Article/Link

[Report Argues Utilities Are Backsliding on Clean Energy Transition](#)

[Amazon Releases New Data Center Pledge](#)

[More Tools Emerge for More Sustainable Use of AI](#)

[EU Targets Data Center Sustainability Labeling System](#)

Summary

9/22/2026 (National): The Sierra Club's latest annual [Dirty Truth Report](#) gave an overall F grade to 76 major U.S. utilities, finding that many are further behind on decarbonization than they were in 2021. According to the report, utilities are extending the lives of coal plants, planning significant new natural gas capacity, and, for the first time in the report's six-year history, reducing the amount of new clean energy being planned year over year. The group argues that much of the new gas buildout is being justified by AI-driven load growth and data center demand, even as utilities forgo lower-cost and faster-to-deploy solar, wind, and battery projects.

10/5/2026 (National): Amazon announced a new [Amazon Data Center Commitment](#), in which it outlines plans to invest more than \$1 billion over five years in communities hosting its data centers, focused on workforce training, education, energy affordability, water sustainability, and local priorities. Amazon also pledged greater transparency, including annual reporting on energy and water use, eliminating NDAs with government agencies, and ensuring its projects do not increase local electricity bills. The company said the program could connect more than 300,000 students to free community college opportunities and train up to 100,000 workers annually by 2028. The initiative comes as data center development faces growing opposition over electricity use, water consumption, environmental impacts, and rising utility costs. Read more about the initiative [here](#).

9/29/2026 (National): As companies grapple with AI's growing environmental footprint, a wave of new tools, frameworks, and methodologies is emerging to help measure and manage AI-related energy use, carbon emissions, water consumption, and resource impacts. This roundup by [Trellis Group](#) highlights new approaches for estimating emissions from proprietary AI models, tracking real-time AI-related emissions, assessing water risks associated with data center power consumption, and identifying more energy-efficient "lighter" AI models. The article also notes that sustainability teams are increasingly pushing AI vendors for greater transparency, as reliable measurement remains a prerequisite for managing AI's environmental impacts.

9/22/2026 (National): The European Commission has proposed a new mandatory sustainability labeling system for data centers larger than 500 kW, requiring facilities to disclose and receive ratings on energy efficiency, water use, energy sourcing, grid flexibility, and waste heat reuse. The proposal is designed to support the EU's goal of significantly expanding data center capacity while limiting impacts on power grids, water resources, and emissions, with sustainability labels expected to begin appearing in August 2027. The measure is currently in a two-month scrutiny period before the European Parliament and the Council of the European Union, while the Commission has also launched a separate 12-week public consultation on future minimum energy-efficiency standards for data centers, with feedback informing legislation expected in 2027. Read the proposal [here](#) and submit feedback for the consultation period [here](#).

Potential Impact

High – The report suggests utilities are increasingly turning to gas generation to meet projected load growth, despite the lower cost and faster deployment of renewables and storage.

High – The initiative reflects a growing industry effort to secure community support for data center expansion before opposition translates into new restrictions or moratoriums.

Medium – The growing body of measurement tools suggests AI sustainability is shifting from estimating impacts to actively quantifying, comparing, and managing impacts of AI deployment.

Medium – The proposal would strengthen oversight of data center sustainability in Europe, with the labeling system potentially paving the way for future mandatory standards.

Other Industry News

Article/Link

[California VPP Sparks Debate](#)

[California Tightens Data Center Rules](#)

[Google's MI Data Center Clears Key Hurdles Amid Community Debate](#)

Summary

9/23/2026 (National): PG&E, Google, and Rewiring America launched the [SHARE virtual power plant program](#), which aims to enroll more than 20,000 home batteries, thermostats, and other devices to support grid reliability while funding new home energy upgrades. Supporters see the initiative as an innovative way to leverage distributed energy resources and reduce costs without burdening utility ratepayers, since Google is funding the program. However, some clean energy and consumer advocates argue the effort avoids a more fundamental issue: whether large new loads such as data centers should be directly responsible for the grid infrastructure costs they create, rather than relying on voluntary programs that may help the grid but do not fully offset those impacts.

9/21/2026 (CA): California Governor Gavin Newsom signed a package of seven data center bills that significantly expand oversight of data center development, focusing on electricity, water use, and land-use impacts. The new laws require greater transparency around energy and water consumption, make developers responsible for grid and utility upgrade costs, require compliance with state energy procurement requirements, and give local communities more information when evaluating proposed projects. The legislation comes amid growing concerns that data center growth could increase electricity demand, strain water resources, and shift infrastructure costs onto existing ratepayers. Read more analysis of the new legislation [here](#).

9/25/2026 (MI): Warren Evans, Executive of Wayne County, vetoed a proposed \$125 million tax incentive package for Google's planned [Project Cannoli](#) data center in Van Buren Township, arguing the approval process was rushed and lacked sufficient public input on the project's potential impacts on water, energy, infrastructure, and county finances. Read the full article [here](#).

10/1/2026 (MI): Just days later, the Wayne County Commission voted 13-0 to override the veto, allowing the tax incentives and community benefits package to move forward. Commissioners emphasized the vote was not an endorsement of the project itself, but rather approval of the negotiated incentive framework, while supporters cited economic development and workforce benefits. Watch the full new story [here](#).

10/1/2026 (MI): The Michigan Public Service Commission (MPSC) approved a 20-year power agreement between DTE Electric and Google, subject to strong ratepayer protections. The order requires Google to cover project-related costs, maintain a minimum billing commitment, provide early termination payments, and fund up to 1,600 MW of renewable energy and 480 MW of battery storage, ensuring other utility customers do not subsidize the project. Read the MPSC's press release [here](#).

Potential Impact

High – The program may benefit consumers, but disagreement remains over whether it sufficiently addresses the grid costs associated with expanding data center demand.

High – California is emerging as a leading testing ground for ensuring data center growth does not shift environmental burdens and infrastructure costs onto existing customers and communities.

Medium – The project illustrates how hyperscale data center development increasingly requires approvals across multiple fronts, from tax incentives and utility regulation to community engagement and local government support.

Other Industry News (Continued)

Article/Link

[\\$10K Offer Fails to Win Over Residents](#)

[How Chicago Data Center Demand Shifts to Surrounding States](#)

Summary

9/28/2026 (PA): [NorthPoint Development](#) offered roughly 4,500 households in Hazle Township, Pennsylvania, a \$10,000 payment if its [proposed 1,300-acre data center campus](#) receives approval, with the project ultimately planned to include up to 15 data center buildings. The offer, which could total \$45 million in direct payments plus another \$120 million in community investments over 15 years, was designed to provide tangible local benefits and build support for the project. Despite the unusually generous package, many residents remain opposed, citing concerns over property values, noise, water use, energy demand, environmental impacts, and broader skepticism toward AI-related development.

9/22/2026 (IL & IN): Despite strong power resources and a long-established data center ecosystem, Illinois has reportedly lost at least \$200 billion in planned data center investment to neighboring markets such as Indiana, Wisconsin, and Ohio. Industry participants cited factors including uncertainty surrounding the state's Biometric Information Privacy Act (BIPA), utility interconnection and power procurement processes, higher development costs, and a pause in Illinois' data center incentive program. As a result, hyperscalers seeking to serve the Chicago market have increasingly shifted projects just across the state line into Northwest Indiana, where cheaper land, comparable incentives, and proximity to Chicago provide similar advantages.

Potential Impact

Medium – The episode underscores that data center support increasingly depends on concerns about long-term quality-of-life and resource impacts, not just financial incentives.

Medium – The trend demonstrates how regulatory and policy differences can reshape data center development patterns even within the same metropolitan region.

Thank You

Let's make bold changes together

Gunnar Carlson
gcarlson@freshcoastclimate.com

Paul Gruber
pgruber@freshcoastclimate.com



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