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WEEK IN REVIEW

AI & Accountability: The Era of 'Let The Chips Fall Where They May' Ends

The week of November 9-14 opened an era of accountability for AI. Two stories that look unrelated make the same point. Nvidia's founder resigned after denying for more than a year a relationship that U.S. intelligence had flagged given potential connections to Chinese security services, and the Tennessee Valley Authority signed a $1.7 billion non-refundable capacity charge agreement with a single data center customer. In both cases an industry that had been trusted to police its own chips sales and to draw responsibly and fairly on shared grid capacity was faced with the end of a laissez faire approach to regulation.

Jensen Huang's exit is a governance failure before it is a scandal. The New York Times reports that Jensen Huang denied for 13 months that his relationship with a former executive of Megaspeed International, a Singapore-based Nvidia customer, was more than business, then admitted an affair to Nvidia's general counsel around November 7 after irrefutable news stories broke. Days later, a second relationship surfaced, with an executive who reported to him, after he had assured the company there were no others. The board met in emergency session on November 11 and he was gone within a day. CFO Colette Kress is interim CEO and Harvey Jones the company's first board chair in the company's history.

The national-security question is larger than one executive. The chips that decide the AI race are designed, sold and in practice compliance-checked by a for-profit company. Megaspeed bought more than $2 billion of Nvidia technology in a year, Singapore reached 22% of Nvidia's quarterly revenue, about $10 billion, and Nvidia then stopped reporting Singapore sales separately when Mr. Huang's connection with Ms. Huang became public in October 2025 . U.S. intelligence, the Times reports, had concluded the Megaspeed executive with whom Jesen Huang was involved was passing information to Chinese intelligence. China rejects the claim, Megaspeed denies diverting chips, and no public finding says Nvidia technology was compromised.

Who knew what, and when, is now the Washington story. The Times reports that: (1) President Trump was briefed roughly a year ago and took no action, (2) that Huang was never given a 'defensive briefing' to alert him of the government's suspicions regarding Ms. Huang, (3) that he was left off the May Beijing Presidential delegation list and (4) then invited aboard by the president despite a further briefing from Secretary Rubio. Treasury Secretary Bessent said on November 13 that Treasury, State, Defense and the trade representative had pressed the Commerce Department for months to put Megaspeed on an export control list and that Commerce did not act. U.S. officials are now reconsidering AI export rules and the open question is how far should they reach into intermediary hubs such as Singapore and Malaysia.

On the power side, accountability has a name: bring your own. The November 3 elections put governors pledged to pause or condition data center approvals in Texas, Ohio and Georgia, and voters sided against development in 40 of 41 local measures. The common remedy is BYOP and BYONC, Bring Your Own Power and Bring Your Own New Capacity: large loads fund, build or contract the generation they need. TVA's charge of $1.521 million per MW, on about 1.1 GW for one customer, is the first hard price on the what is the expanding wave of BYOP/BYONC alternatives. We expect these rules to spread and accelerate through the 2027 legislative sessions and utility tariff cases.

Exposure is not cancellation. Our moratorium-risk analysis estimates 25.6 GW of a modeled 62.2 GW of 2028 U.S. additions in Texas, Ohio, Georgia and Oregon are in danger of delays. That is 41% geographically exposed, not 41% canceled. The 12.0-14.8 GW slippage band is a scenario sensitivity, not a forecast.

Capital is sorting the buildout, not abandoning it. Morgan Stanley, as reported by Bloomberg, counts $646 billion of AI and data center debt issued in 2026 to date against $216 billion in all of 2025, yet only one leveraged AI deal cleared in October, indicating a market that is significantly contracting. Microsoft is tightening oversight of neocloud projects, Nscale disclosed $5.5 billion of debt ahead of its IPO, and SoftBank booked a $3.7 billion loss on power equipment it reserved and will not take. Fully contracted, power-secured projects still find buyers. The trade is not "AI is over." It is "delivery risk has a price."

PJM's Market Monitor put a number on the ratepayer argument. Its third-quarter report calls the $29.4 billion of capacity cost it attributes to data center load across four auctions irreversible, and it estimates the December auction could add $5-$10 billion more, and notes that PJM's Reliability Backstop filing has slipped until after that auction. For Pennsylvania developers, cost allocation stays at the center of every tariff and collateral negotiation.

13 MONTHS HUANG'S DENIAL first press inquiry to admission; NYT	**$1.7B** TVA CAPACITY TOLL one customer; about 1.1 GW; non-refundable	**40 of 41** LOCAL BALLOT MEASURES went against data centers, Nov. 3	**$29.4B** PJM CAPACITY COST IMM: data center load, four auctions

THE DPD VIEW | WHAT CHANGED THIS WEEK

STRATEGIC CHIPS, PRIVATE STEWARDS

Arguably for the first time, an instrument this central to national security is designed, sold and compliance-checked mainly by profit-seeking companies. Expect licensing, end-user verification and intermediary rules to tighten, with offshore billing hubs first in line to be restricted.

BRING YOUR OWN POWER, OR PAY THE TOLL

State approvals, cost-allocation rules and utility tariffs now assume large loads fund their own capacity. TVA priced the alternative at $1.521 million per MW, non-refundable. A site with its own incremental generation is a different asset from one that needs the grid's.

SUPPLIER GOVERNANCE REACHED THE CAPITAL STACK

Nvidia is chipmaker, lender, guarantor and customer to much of the neocloud sector. A leadership change there is a potential capital flow event for every project financed with Nvidia's balance sheet, not only a product-roadmap question.

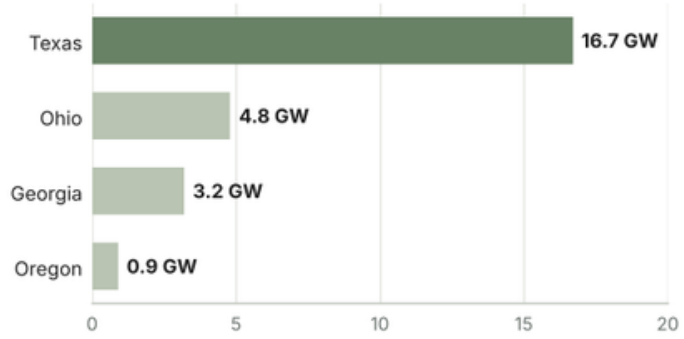
THE SIGNALS TO UNDERWRITE

SIGNAL	CURRENT READ	WHAT WOULD CHANGE THE VIEW
Demand	Large contracts are still signing and leased campuses are fully subscribed. The complaint is late delivery, not weak demand.	Hyperscalers cancelling signed leases rather than declining options.
Credit	Investment-grade issuers fund at will. One leveraged AI deal cleared in October, above 11%.	Leveraged AI issuance reopening without sponsor or chipmaker guarantees.
Power	Large loads are being asked to bring generation, pay for upgrades and accept curtailment. TVA put a price on it: $1.521M per MW, non-refundable.	A December PJM auction that clears without a further data center cost shift.
Policy	The Texas freeze now looks likely to run into the 2027 session. Local votes are running against development.	Texas grandfathering rules that release already-permitted projects.
Export control	AI chip export rules are under review after the Huang resignation. Treasury says Commerce failed to list Megaspeed.	New licensing or end-user rules for Southeast Asian intermediaries, or an enforcement finding against Nvidia.

CHARTS OF THE WEEK | POLICY EXPOSURE AND THE CREDIT BAR

Texas is 65% of the policy-exposed 2028 pipeline

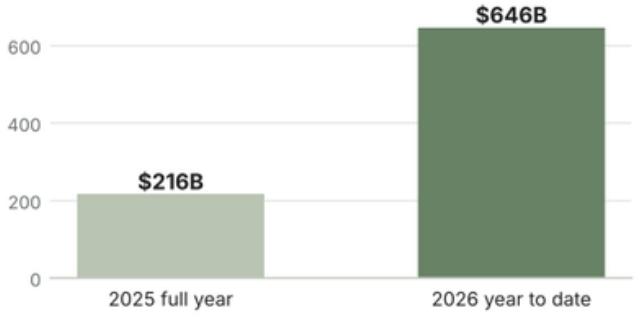
GW of modeled 2028 U.S. net additions in the four exposed states (25.6 GW of 62.2 GW total). Exposure, not cancellation.



Source: supplied Nov. 14 moratorium-risk briefing; DPD presentation.

AI debt issuance tripled, but the leveraged window nearly shut

AI and data-center debt issuance, $ billions. October leveraged AI issuance was one $5B deal priced above 11%.



Source: Morgan Stanley count as reported by Bloomberg, Nov. 10; DPD presentation.

Our interpretation:the two charts describe the same repricing from opposite ends. Roughly two-thirds of the policy-exposed 2028 pipeline sits in one state whose approval freeze now has no clear end date, so the schedule risk is concentrated rather than diffuse. At the same time the debt market is open in aggregate and nearly closed at the speculative end. A project needs both a state that will permit it and a capital structure that will fund it, and this week both tests got harder for anything not already approved and contracted.

NUMBERS OF THE WEEK | WHERE THE RISK SITS

16.7 GW TEXAS 2028 MODELED ADDITIONS supplied briefing; 65% of exposed total	**5.8 GW** PROJECTS MISSING PERMITS SemiAnalysis; 5.2 GW in Texas	**$5-$10B** DECEMBER PJM BRA COST AT RISK PJM IMM estimate for 2029/30
$9.5B SOFTBANK EQUIPMENT PREPAID about $2.9B of deposits forfeited	**$1.521M** TVA CHARGE PER MW non-refundable; FY2027 cohort	**22%** SINGAPORE SHARE OF NVIDIA SALES July 2025 quarter; last disclosed

Sources: PJM IMM Q3 report | CNBC - ballot measures | Bloomberg - Morgan Stanley | Bloomberg - SoftBank | Utility Dive - PPL | NYT - Huang | TVA 10-K summary

ANALYST READ Scarcity value is moving toward ‘vested’ power: sites with final approvals, firm gas, emissions permissions and creditworthy tenants. Expect investors to pay up for executable megawatts and discount paper pipelines more steeply than they did a month ago. Smaller inference sites may start to compete with giant campuses on speed and political acceptability rather than on unit cost, particularly in the sub-50MW size range that avoids many of the large-load tariffs and regulations.

LEAD STORY | NVIDIA AND THE ACCOUNTABILITY QUESTION

A SECURITY ASSET, A PUBLIC COMPANY AND A 13-MONTH DENIAL

Nvidia said on November 12 that Jensen Huang had resigned as president, chief executive and director, effective immediately. The board had accepted the resignation the day before. CFO Colette Kress became interim CEO while remaining CFO, and longtime director Harvey Jones became the company's first board chair. The board will consider internal and external candidates and said it expects operations, customer commitments and the product roadmap to continue without interruption. On November 14 The New York Times published the fullest account so far, drawing on a year of reporting and more than 100 interviews. It turns a key-person event into a test of corporate governance, export enforcement and the U.S. government's own conduct.

The denial. In September 2025 the Times asked Nvidia about Huang's relationship with the then-leader of Megaspeed International, a Singapore data center company. Nvidia answered that the relationship was strictly business. A crisis communications firm was engaged, and Huang's daughter, who served as his chief of staff, pressed for a forceful rebuttal. Huang held that position for 13 months, including after the Times reported in October 2026 that U.S. intelligence believed the executive was working with China's Ministry of State Security. Around November 7, after reports of a classified memo by Secretary of State Marco Rubio, he admitted the affair to general counsel Tim Teter when Teter confronted him at his private residence.

The governance failure. The board's first response was a statement that it “had full confidence in Jensen” while it hired an outside law firm. Huang privately assured the general counsel, who relayed it to directors, that there were no other relationships. Four days later the Times reported about a second relationship, with an executive who reported directly to him, and CNBC has reported a possible third. The 10-member board met in emergency session and the resignation followed within 24 hours. Both relationships, one with a customer and one with a subordinate, breached the code of conduct Huang had championed. The episode exposes corporate structure weaknesses at Nvidia: several Huang family members held prominent roles at the company, and Nvidia had never had a board chair before this week.

The national-security question. Megaspeed bought more than $2 billion of Nvidia technology in a year, making it one of the largest AI chip buyers in Southeast Asia. It belongs to a class of intermediaries that buy American chips legally and rent the computing power to Chinese companies. The U.S. government suspects some, Megaspeed among them, of going further and diverting chips to China. Trade records cited by the Times show a Malaysian sister company imported at least $4.8 billion of equipment containing Nvidia technology between June 2024 and February 2026. About a year ago, the Times reports, that President Trump was briefed that U.S. agencies had the Megaspeed executive under surveillance, had determined she was passing information to Chinese intelligence, and had found a close relationship with Huang. U.S. officials reportedly had long worried that Jensen Huang was too relaxed about his chips reaching China's military or intelligence services. China rejects the espionage claims. Singapore says its investigators found insufficient evidence that she committed offences, though it has barred her from re-entering the country, and its investigation of Megaspeed and six other individuals continues.

Export enforcement and the Singapore question. Singapore accounted for 22% of Nvidia's revenue, about $10 billion, in the quarter ended July 27, 2025, second only to the United States. After the Times's October 2025 article on Megaspeed, Nvidia switched to reporting sales by customer headquarters, and Singapore disappeared from its disclosures. Nvidia has said more than 99% of the controlled data center product billed to Singapore that quarter was for U.S.-based customers, and that it stopped selling to Megaspeed in June 2025. The Times reports, citing U.S. officials, that Nvidia kept doing business with the company after October 2025. Those accounts conflict, and only filings, audit work and enforcement outcomes will settle them.

A strategic asset in private hands. This is the issue that outlasts the personalities. Washington treats advanced AI accelerators as instruments of national power, yet they are designed, priced, allocated and sold by a company whose duty is to its shareholders, and export enforcement depends heavily on that company's own customer checks. Arguably no technology of this strategic weight has sat so fully in for-profit hands. Huang lobbied openly against controls, won approval in December 2025 to sell H200 chips to China in exchange for a 25% government share of the sales, and told employees in August that Nvidia's greatest risk was Washington. The Times's account paints a picture of an executive with unparalleled influence over that policy who was personally exposed to a foreign intelligence service, and the government warned neither him nor his board.

WHO KNEW WHAT, AND WHEN | THE QUESTIONS FOR WASHINGTON

WHEN	WHAT IS REPORTED	OPEN QUESTION
Late 2025	The president is briefed that the Megaspeed executive is under U.S. surveillance and close to Jensen Huang. No action follows, and Huang receives no defensive briefing.	Why was the head of the most strategically important U.S. chip company not warned? The Times says the reasons are unknown. Such warnings can alert the surveillance target.
Dec. 2025	The White House clears H200 sales to China in return for a 25% government share.	Was the intelligence weighed when license policy was loosened?
Spring 2026	Rubio's classified memo on the relationship and the executive's Ministry of State Security contacts goes to a handful of Cabinet officials. Axios reports the Commerce Secretary received it.	Why did Megaspeed stay off the export control list? Bessent says Treasury, State, Defense and USTR wanted it listed and that Commerce "has the pen."
May 2026	Huang is left off the Beijing summit delegation, then invited by the president to join Air Force One in Alaska. Rubio briefs the president en route. The invitation stands.	Why include him on the China trip after that briefing, with Nvidia chip sales on the summit agenda?
Nov. 2026	Huang resigns. Officials reconsider AI export rules. Congressional Democrats demand that Commerce preserve records, the Commerce Secretary agrees to appear before Senate Banking, and CNN reports advisers have discussed his removal.	How far do new rules reach: Megaspeed alone, or billing and hosting hubs such as Singapore and Malaysia? Why not sooner?

ESTABLISHED	REPORTED, NOT ADJUDICATED	NOT ESTABLISHED
Jensen Huang resignation as president, CEO and director. Kress interim CEO and CFO. Jones first board chair. Huang's acknowledgment of the relationship. Bessent's public criticism of Commerce. Singapore's continuing investigation of Megaspeed.	That U.S. intelligence identified the former Megaspeed executive as working with Chinese intelligence. That the president was briefed a year ago. That Nvidia dealt with Megaspeed after October 2025. That the board forced the exit. China rejects the espionage claims. Megaspeed denies diverting chips.	Any loss of Nvidia trade secrets or policy information. Any export-control violation by Nvidia. Any change to the Vera Rubin roadmap, supply commitments or financing arrangements with neocloud customers. The scope or timing of new export rules.

The strategic issue is procurement, not performance. Google announced TPU 8tx for confidential inference and TPU 8i Max, which packages two 8i chips for long-context work, on November 9, its third and fourth TPU systems this year. Specialized accelerators are moving from alternative to credible hedge. Nvidia keeps its software ecosystem and scale advantage, and a leadership event does not mechanically change the installed base.

Investment view. Watch orders and lead times for Vera Rubin systems, the terms of Nvidia-backed neocloud financing, residual-value guarantees, disclosure on customer concentration and export compliance, and whether Kress preserves the integrated chip, networking and software roadmap. The immediate sensitivity is financial underwriting and counterparty confidence. Existing GPUs do not stop performing. Add export policy to the list. Tighter rules on intermediary hubs would squeeze a billing channel that was 22% of sales when last disclosed, and would steer scarce chips toward buyers who can show where they run.

WHY THE MICROSOFT / NISOURCE STRUCTURE MATTERS

Nvidia capital sits inside several of the structures that finance powered shells: convertible notes at Nscale, neocloud lease guarantees, and capacity leases back from its own customers. If a successor tightens that support, the tenants most exposed are the leveraged neoclouds whose leases back project debt. There is a second-order effect: if export rules redirect chips from offshore intermediaries to verifiable domestic buyers, the binding constraint on U.S. deployment increasingly moves further toward U.S. project energizations and away from chip supply.

Sources: Nvidia announcement | Nvidia 8-K | WSJ - Singapore sales | Straits Times - Singapore ties | Bloomberg - Google TPUs | NYT - Huang | AP - Bessent | CNBC - Bessent | CNN - Commerce | NBC - Singapore | Fortune - Singapore revenue

POLICY | THE MIDTERMS REPRICE 2028 AI SUPPLY

TEXAS IS THE SCHEDULING VARIABLE

The November 3 elections turned permitting and utility cost allocation from local issues into a national underwriting variable. Gina Hinojosa defeated three-term incumbent Greg Abbott in Texas, Amy Acton won the Ohio governor's race and Keisha Lance Bottoms won Georgia, three of five governorships Democrats flipped. On Ballotpedia's count, voters approved 27 measures restricting data centers and rejected 13 that would have eased development. Harwood, North Dakota was the only exception. The votes express concern about electricity bills, land use, water and who captures the benefits. They are not a uniform rejection of compute demand.

Texas was already frozen before the vote. Governor Abbott ordered an audit of every data center in the ERCOT queue on August 3, ERCOT paused studies and energization approvals for large loads, and on September 21 TCEQ was told to stop issuing data center permits. The audit reports on December 10. The Legislature convenes January 12 and Hinojosa is sworn in January 19, having promised a moratorium on all new approvals until lawmakers pass protections. Analysts quoted in the Texas press expect her to extend and possibly strengthen the existing order, which is largely within a governor's authority. Consensus analysis assigns 16.7 GW of modeled 2028 net additions to Texas, against 4.8 GW in Ohio, 3.2 GW in Georgia and 0.9 GW in Oregon.

What is still unsettled is what matters commercially: Grandfathering, exceptions, whether behind-the-meter gas air permits fall inside the freeze, and how long a session takes to produce law. Projects with final approvals are economically different from expansions that need a new air or grid decision.

The slippage math needs care. The forecast 12.0-14.8 GW illustrative band, 19-24% of modeled 2028 additions, applies assumptions to the exposed states. It is not a verified project-level forecast. SemiAnalysis separately flags 5.8 GW of 2027 and first-half-2028 projects lacking critical permits, 5.2 GW of it in Texas. The two cohorts overlap and should not be summed. In valuation terms a one-year deferral changes revenue recognition, financing carry and equipment utilization even where the demand survives.

Pennsylvania is differentiated, not unrestricted. Governor Shapiro was re-elected without endorsing a pause, which his opponent had called for. But his August Executive Order requires new data centers to fund their own electricity use, data centers were removed from Fast Track permitting, and local approvals and utility rate cases still gate every project. PPL's chief executive told analysts the results could support its Pennsylvania and Kentucky pipelines. The PJM cost-allocation fight highlighted in our Power section is the larger state risk.

Bring-your-own is the common denominator. Pause pledges get the headlines, but the conditions for lifting them are converging. Ohio's governor-elect ties approvals to data centers covering their full utility cost. Pennsylvania's executive order requires new data centers to fund their own electricity. PJM's market monitor wants large loads to bring genuinely incremental generation, and Microsoft and Lambda have pledged to pay their own power and grid costs. Expect BYOP and BYONC language to move from executive orders and pledges into statute and tariffs during the 2027 sessions. TVA, in the next section, shows what the charge looks like once a utility writes it down.

STATE BY STATE | WHAT THE VOTE CHANGED

STATE	WHAT CHANGED	UNDERWRITING READ
Texas	Existing ERCOT large-load pause and TCEQ permit pause; governor-elect pledges a moratorium until the Legislature acts. Audit due Dec. 10; inauguration Jan. 19.	Treat unpermitted 2028 Texas capacity as dated no earlier than the end of the 2027 session until grandfathering is defined.
Ohio	Acton supports a "conditional moratorium" tied to data centers covering their full utility cost. All 21 local measures went against development.	Local referendum risk now sits alongside state policy. Check township and county ballot exposure site by site.
Georgia	Bottoms won after campaigning to pause or tighten regulation of new projects. LandGate counts 44 local moratoria in the state.	Georgia Power large-load terms and local zoning are the gating items, more than a statewide ban.
Pennsylvania	Shapiro reelected; no statewide pause. Executive order on self-funded power, Fast Track removal and PJM cost debate remain.	Relative winner on permitting certainty, but only for projects that bring or pay for their own capacity.

DPD VIEW: Sort every project pipeline into four classes: (1) permitted and energized, (2) entitlement-complete and waiting on a utility build, (3) committed generation that is not yet permitted, and (4) land plus a marketing deck. The election widened the discount between the first class and the fourth more than it changed the value of either end.

Sources: NBC - governors | CNBC - ballot measures| Texas Tribune | Texas Public Radio | Houston Chronicle | S&P Global - Pennsylvania

RATES | BRING YOUR OWN POWER GETS A PRICE

TVA SIGNS A $1.7 BILLION CAPACITY TOLL

TVA's fiscal 2026 annual report, filed November 13, discloses a Capacity Commitment Charge agreement signed November 10 under which it is entitled to $1.7 billion: $31 million at execution and the balance over 59 installments. Pricing is about $1.5 million per MW of requested capacity above 5 MW, on a cohort basis TVA can reset for later customers. TVA did not name the customer. It is the first disclosed dollar value for a non-refundable capacity fee on a data center, and the clearest example yet of where post-election bring-your-own rules are heading in the foreseeable future.

The math. The rider's exact rate for the fiscal 2027 cohort is $1.521 million per MW. That implies a request of about 1,120 MW. The 59 installments work out to roughly $28.3 million each, so the $31 million at signing is in effect the first of 60 near-level payments, consistent with the three-to-five-year payment window TVA described in August. Discounted at 8%, the stream is worth about $1.4 billion, or roughly $1.25 million per MW. The fiscal 2027 cohort is capped at 2,000 MW, first-come, first-served. This one contract takes about 56% of it and leaves roughly 880 MW at this price. A fully subscribed cohort would bring TVA about $3.0 billion. These are DPD calculations from the disclosed terms.

The program & the power interruption provision. The board's August 20 action took data centers out of the manufacturing rate class, at roughly 10% higher power charges phased in over three fiscal years. The commitment charge sits on top of those rates. Load under a contract effective before October 1 is exempt. A companion Power Interruption Provision covers data centers that want to energize before generation exists to serve them. TVA estimates that without the charge each additional 1,000 MW of data center demand would raise non-fuel rates about 2%. Its connection process holds about 5 GW of data center load, with another 27.5 GW of expressed interest. TVA has said it remains open to customers bringing their own generation.

Who it likely is. TVA has not said, and this is inference. SpaceXAI is the leading candidate. On August 20 the board approved a load above 100 MW for MZX Tech LLC, the SpaceXAI affiliate that owns the Colossus 2 site in Memphis, as a direct TVA customer under the new data center rate, with SpaceXAI building the transmission lines and transformers. The size fits: Memphis Light, Gas and Water has said it discussed grid options of up to 1.1 GW for that site. Grid approvals so far total 300 MW, against about 1.24 GW of permitted on-site turbines in Southaven, Mississippi. The only large-load vote at the November 10 board meeting was Korea Zinc's Crucible smelter, 230 MW from 2029, which is consistent with this customer's approval having come earlier.

Why it matters. Peers have used refundable security and minimum bills. TVA's charge is a sunk fee. Spread over 10 to 20 years at 8% and an 85% load factor, it adds roughly $21-$30 per MWh to delivered grid power, before the 10% rate premium and curtailment exposure. That is a material shift in the comparison between grid service and behind-the-meter generation. Watch the board: two directors may depart, which would leave it one short of a quorum by January and could delay any repricing of the next cohort. Its next meeting is tentatively set for February 17-18.

$1.7B CAPACITY COMMITMENT signed Nov. 10; customer unnamed	**1,120 MW** IMPLIED REQUEST DPD arithmetic at the rider rate	**$1.521M** PER MW, NON-REFUNDABLE FY2027 cohort; above first 5 MW	**56%** OF THE FY2027 COHORT 2,000 MW cap; about 880 MW left

WHO PAYS FOR CAPACITY | THREE DESIGNS AND A PROPOSAL

UTILITY	MECHANISM	WHAT THE LOAD GETS BACK
TVA	Capacity Commitment Charge of $1.521M per MW above 5 MW, paid over three to five years, on top of a separate data center rate.	Nothing. The fee is non-refundable and the cohort price can be reset for later customers.
Dominion (GS-5)	From January 1, 2027: 14-year contracts, minimum demand of 85% for wires and 60% for generation, and $1.5M per MW of collateral.	Collateral is released one-fourteenth a year. The same number as TVA, but security rather than a fee.
AEP Ohio	Data center tariff with minimum billing demand of 85% and collateral requirements for loads of 25 MW or more.	Service at tariff rates. The exposure is the minimum bill, not an entry fee.
PJM IMM proposal	Remove data center load from the capacity market and require large loads to bring genuinely incremental generation.	Not adopted. It is the BYONC model in its purest form, and the direction state tariff cases are moving.

DPD VIEW: A non-refundable $1.5 million per MW is the clearest public price yet for grid capacity that a data center does not bring itself. Wherever regulators adopt similar terms, it strengthens the economics of behind-the-meter and bring-your-own-generation projects, and it raises the value of interconnection capacity that is already secured.

Sources: TVA 10-K summary | MLQ - TVA agreement | FRMPWR - rider terms | Commercial Appeal - rate vote| Yahoo Finance - SpaceXAI| Herald Business - Korea Zinc | Energy News Beat - Dominion | AEP Ohio tariff | WSMV - TVA quorum

CREDIT | STRONG SPONSORS BORROW; WEAKER ONES PAY UP

THE ISSUANCE HEADLINE INDICATES A TIGHTER MARKET

Morgan Stanley's count, as reported by Bloomberg, is $646 billion of AI and data center debt issued so far in 2026, roughly three times the $216 billion of all 2025. Inside that total, October produced only $5 billion of leveraged AI issuance: one financing for Volta Infrastructure, a company founded in February, for a Norwegian campus, priced above 11%. Semafor reported that lenders balked at its short record and its reliance on a single AI lab for demand. The bank's warning is that unbuilt campuses will need more expensive debt, larger equity cushions, faster amortization and stronger tenant credit.

Investment-grade balance sheets still fund on demand. Meta launched a roughly $25 billion dollar-and-euro bond program on election day, including a 9 billion euro debut that drew record European orders, as large issuers moved ahead of a window they feared might narrow. Microsoft's public commitment to pay its own electricity and grid costs shows ratepayer protection becoming a commercial prerequisite rather than a public-relations line.

Nscale shows the transmission mechanism. Bloomberg reports that its amended IPO filing shows $5.5 billion of debt at September 30 against $137 million at June 30, and a $2 billion Nvidia commitment within more than $3 billion of convertible financing. Its six-year, $44.6 billion Anthropic contract covers about 460 MW at the Monarch campus in West Virginia, but the contract is contingent on Nscale securing financing and the customer can exit if milestones slip. Microsoft separately declined an option of roughly 500 MW at Nscale's Ward County, Texas site, where grid approval was unresolved. The existing 240 MW agreement stays in place and other tenants have since taken capacity there.

Microsoft is the sharper signal. Bloomberg reports tighter oversight of IREN, Nebius and Nscale projects after delays and cost overruns, including sending its own staff to sites. Nebius and IREN each fell about 16% on November 5. CoreWeave, by contrast, beat third-quarter expectations and raised its forecast. Contract quality, security package and available electricity now matter more than announced pipeline.

$646B 2026 AI DEBT, YEAR TO DATE Morgan Stanley via Bloomberg	**$216B** ALL OF 2025 same count	**>11%** VOLTA PRICING the only leveraged AI deal in October	**$5.5B** NSCALE DEBT, SEPT. 30 $137M at June 30

WHO CLEARED, AND ON WHAT TERMS

BORROWER	WHAT HAPPENED	READ-THROUGH
Meta	About $25B across dollars and euros, launched on election day.	IG issuers can still choose their window, but are keeping deals smaller than earlier in the year.
Volta	$5B for a Norway campus at more than 11%, anchored by a large Apollo order.	First-time developers pay equity-like yields even with a frontier-lab tenant.
Nscale	$5.5B of debt in one quarter; Nvidia convertible support; IPO pending.	Chipmaker credit is carrying part of the capital stack that banks will not hold alone.
Microsoft counterparties	Options declined, site inspections, revised delivery timelines.	The anchor tenant is now underwriting the developer's execution, not just signing the lease.

BOTTOM LINE: Diligence should reconcile customer prepayments, GPU financing liens, construction obligations and the date each hall can actually generate cash. An announced contract value says little until the financing that makes it deliverable has closed.

Sources: Bloomberg - Morgan Stanley | Semafor - Volta | Bloomberg - Nscale filing | Bloomberg - Meta | Bloomberg - Microsoft and neoclouds | Bloomberg - Ward County

BEHIND THE METER | THE COST OF OWNING AN EQUIPMENT QUEUE

SOFTBANK'S $3.7 BILLION LESSON IN OPTION VALUE

SoftBank booked a loss of 597.2 billion yen, about $3.7 billion, after revising procurement of power-generation equipment for U.S. data centers. It contributed more than half of a roughly $7 billion net loss for the fiscal second quarter. Through September its subsidiary had prepaid about $9.5 billion to secure manufacturing capacity and equipment. Roughly $2.9 billion of that was nonrefundable deposits on purchases now excluded from the plan, and contract modifications and settlements added about $0.9 billion. About $6.6 billion stays allocated to equipment SoftBank still intends to take, and it holds conditional rebates of up to $2.1 billion on future purchases. The Wall Street Journal reported reservations well above 13 GW of gas turbines.

The lesson is not that gas turbines are unnecessary. An equipment slot is an option on future generation, and the option expires economically if permits, site readiness, gas transport, a contracted customer or funding fail to converge. A reservation with poor refund terms can turn an attempt to protect a schedule into an impairment. A funded power project with a customer and gas secured preserves the same option's value.

The write-off is not a project cancellation. SoftBank's presentation describes the loss as unrelated to its PORTS-Pike campus in Ohio, which it still lists as preparing for construction with a 20-year OpenAI lease, and its CFO rejected a public claim that it had defaulted on turbine orders. Investors should separate a procurement reset from a decision to abandon capacity. Turbine and fuel-cell suppliers sold off on the news regardless, on fear that order books contain more speculative reservations than assumed.

The same week showed the other side of the trade. The Financial Times reported that Anthropic agreed in late September to pay about $3.4 billion to take over 1.7 GW of Caterpillar generator orders, with installation capability, from OnePWR Solutions, which had placed them roughly two years ago and needed financing to complete the purchase. That is about $2,000 per kW for a place in line. Williams reported third-quarter adjusted EBITDA of $2.039 billion, up 6%, brought its Socrates power project fully online ahead of schedule and expects to sign one or two more power projects by year-end. Fuel, generation and a contracted customer in one structure is the model that is being rewarded.

$9.5B PRE-PAID THROUGH SEPTEMBER SoftBank equipment	**$2.9B** DEPOSITS FORFEITED nonrefundable; excluded purchases	**$0.9B** CONTRACT CHANGES modifications and settlements	**$2.1B** CONDITIONAL REBATES on future purchases

UNDERWRITING A RESERVATION | QUESTIONS FOR TURBINES, ENGINES AND FUEL CELLS

TERM	WHAT TO ASK	WHY IT MATTERS
Deposits	Are they refundable, creditable to other orders, or assignable to a third party?	Assignability is what let OnePWR's queue position be sold rather than written off.
Milestones	What progress payments and liquidated damages apply if the site slips?	Payments that outrun permitting were the source of SoftBank's charge.
Fuel and air	Is firm gas transport contracted and is the air permit in hand for this unit type?	In Texas the permit itself is now the paused item.
Performance	What OEM availability and warranty terms back the unit in continuous duty?	Lenders finance delivered, warranted capacity, not a slot.

DPD VIEW: OEM queue scarcity is not a substitute for a bankable power-service contract. The slot is worth what a buyer with a site, a permit and a tenant will pay for it, and this week supplied one price for each outcome.

Sources:Bloomberg - SoftBank | WSJ - turbine reservations | Bloomberg - turbine stocks | TNW - Anthropic / OnePWR | Williams Q3

POWER | THE MARKET WILL CHARGE LARGE LOADS FOR THEIR FOOTPRINT

PJM'S MONITOR MOVES FROM DIAGNOSIS TO INVOICE

PJM's Independent Market Monitor found energy-market results competitive through the first nine months of 2026 and the recent capacity auctions not competitive. It says including existing and forecast data center load in the capacity market has produced an irreversible $29.4 billion increase in capacity costs across four auctions, a figure it first published in July after the 2028/29 auction. What is new is the framing and the forward estimate: data center load added $9.95 per MWh, or 9.8%, to the total cost of wholesale power in the first nine months, taking it to $111.61, and the December auction for 2029/30 could add another $5-$10 billion. The monitor also criticized PJM for not delivering on the ratepayer-protection principles agreed with governors and the White House.

Energy prices rose too, for several reasons. The real-time load-weighted average price rose 48.4%, from $50.51 to $74.98 per MWh, over the same nine months. Fuel, transmission-constraint penalty factors and weather all contributed, and the increase should not be attributed to data centers alone.

The policy direction is consequential. The monitor wants data center load removed from the capacity market and procured separately, with large new loads paying for upgrades and bringing genuinely incremental generation. That is a different test from diverting a legacy plant's output to a colocated facility. With the Reliability Backstop filing now delayed until after the December auction, most forecast data center load stays in that auction, and state tariff proceedings become the next venue for allocating the risk.

Utilities are expanding capital plans in parallel. PPL raised its 2027-2030 base plan to $25 billion, $2 billion above the prior plan, mainly for a proposed 645 MW combined-cycle unit in Kentucky targeted for 2032 and subject to approval. It reported 35.3 GW of Pennsylvania data center projects in advanced stages, up 3.5 GW in the quarter, but only about 4 GW of added peak demand at a 50% or better probability. The first number is a pipeline metric, not an energization schedule. PSEG and Constellation plan a 200 MW uprate at Salem, of which PSEG's share is 112 MW, while an extended refueling outage at Salem 1 is being assessed.

REGULATION | DIFFERENT RULES, SAME COMMERCIAL QUESTION

TRACK	WHAT CHANGED	COMMERCIAL READ-THROUGH
PJM IMM	$29.4B called irreversible; $9.95/MWh data center impact; $5-$10B more possible in December.	Expect tariffs and collateral terms to assume large loads fund their own capacity.
PJM backstop	Reliability Backstop filing delayed until after the December auction.	Forecast load stays in the auction; pricing risk for 2029/30 is live.
ERCOT	CEO Pablo Vegas wants authority to curtail data centers before a formal grid emergency. Current law already allows curtailment of large new loads once one is declared.	Firm service in Texas increasingly means firm except when the grid is tight. Price backup accordingly.
Norway	Statnett paused new data center grid reservations until no later than Aug. 1, 2027; licensing scheme to follow.	Even power-surplus markets are rationing connections by project type.
Malaysia	Regulators are developing a separate wholesale power market for large users including data centers.	Ring-fenced pricing for large loads is becoming a global template.

BOTTOM LINE: A data center's power rights increasingly arrive with their own costs, flexibility obligations and scrutiny. In PJM the question for the next twelve months is not whether large loads pay more but through which mechanism, and whether projects that bring their own incremental generation are treated differently from those that do not.

Sources:PJM IMM Q3 report | IMM release | Utility Dive - PPL | Utility Dive - PSEG | Bloomberg - ERCOT | Bloomberg - Norway | Bloomberg - Malaysia

THE COUNTERTRADE | SMALLER, DISTRIBUTED AND POWER-READY

MOVING THE CHIPS TO POWER THAT ALREADY EXISTS

The most interesting development vector of the week is Nvidia's reported approach to Apollo Global Management about converting some of the more than 130 telecom buildings owned by Apollo-backed Brightspeed, across as many as 20 states, into a distributed AI inference network. The Information reports that Nvidia estimates the portfolio has roughly 1 GW of available power. That is an initial identification by an interested party. It is not a statement that 1 GW is permitted, deliverable or capable of supporting liquid-cooled rack densities, and the average works out to under 8 MW per building.

The same thesis appeared in a financing. Torus raised $500 million, led by Magnetar, for its Foundry product: prefabricated units that combine batteries, cooling, networking and compute in 1-20 MW installations at commercial and industrial sites with spare grid capacity, with deployment the company puts at 12 to 16 weeks. That is a different demand shape from a campus that needs 500 MW at a new transmission interconnection.

The advantage is not exemption from rules. A 20 MW site still has grid, air, fire, noise and zoning obligations. The advantage is that modular loads can use existing infrastructure, scale in increments, sit nearer to applications and spread approval risk across many jurisdictions. The thesis fits inference, where distributed capacity is productive without the tight physical coupling that leading-edge training clusters require.

Power hardware is adapting. Nvidia's push toward DC distribution and solid-state transformers opens a prospective market for DG Matrix, SolarEdge and others aiming to cut conversion losses and floor space. These devices still face commercialization and reliability hurdles and do not replace substations, gas supply or utility upgrades where those are the binding constraint.

Revenue math explains the urgency. At an illustrative $20 million of annual revenue per IT megawatt, in line with recent neocloud contract pricing, a 100 MW AI factory generates about $167 million a month. On the DPD's own compute-billing range of $33-$50 per IT watt-year, used in the last edition, the same 100 MW represents $275-$417 million a month to the model provider. Both are gross-revenue scales, not lost profit, and the gap between them is the margin above the landlord. A month without power defers or forfeits revenue depending on utilization, delivery terms and contract structure.

130+ BRIGHTSPEED BUILDINGS across up to 20 states	**1 GW** NVIDIA POWER ESTIMATE portfolio total; unaudited	**1-20 MW** TORUS FOUNDRY UNIT per site	**12-16 WKS** TORUS DEPLOYMENT CLAIM company figure

CAMPUS VERSUS DISTRIBUTED | WHAT EACH MODEL HAS TO PROVE

GIGAWATT CAMPUS	DISTRIBUTED INFERENCE	WHAT WOULD VALIDATE IT
Lowest unit cost and the only home for frontier training. Needs a new interconnection or on-site generation, a statewide permitting path and multi-billion-dollar project debt. Most exposed to the Texas freeze and to capacity-cost allocation.	Uses existing service and buildings. Faster and politically quieter. Has to prove cooling retrofits, per-site power quality, fleet operations and that customers will place inference workloads away from core regions.	A signed tenant for a multi-site portfolio, site-level power audits that confirm the headline capacity, and lenders willing to finance a pool of small sites on portfolio terms.

DPD VIEW: For a brownfield developer the read-through is favorable. Sites with existing electrical service, industrial zoning and a history of heavy load are the common input to both models, and the political premium on reusing them rose this week.

Sources: The Information - Nvidia / Apollo | Bloomberg - Torus | Bloomberg - solid-state transformers | Avanza Energy - revenue math

WEEKLY ROUNDUP | FINANCING, NEOCLOUDS AND COMPUTE

• **Anthropic IPO** set a $70-$78 range for 825 million shares, raising up to $64.4B at a fully diluted value of about $1.4T at the top, below earlier talk of $1.5-$2T. Trading is expected November 19. Terms are proposed until priced. The filing's infrastructure obligations keep the monetization hurdle above the power stack in view. Bloomberg

• **Nscale** amended its IPO filing to show $5.5B of debt at September 30 against $137M at June 30, with a reported $2B Nvidia convertible commitment. The balance sheet was built in one quarter, ahead of the revenue it is meant to fund. Bloomberg

• **Microsoft / Nscale Texas**: Microsoft did not exercise an expansion option of roughly 500 MW at Ward County while grid approval was unresolved. The existing agreement remains and other tenants have taken capacity at the site. Bloomberg

• **Microsoft / neoclouds**: tighter oversight of IREN, Nebius and Nscale projects after delays and cost issues. Execution is being repriced project by project rather than sector-wide. Bloomberg

• **Nebius** reported third-quarter revenue of $980.8M, ahead of estimates, but guided 2026 sales to the low end of its $3.0-$3.4B range and the shares fell sharply. Capacity delivered, not contracts signed, is what the market is paying for. Bloomberg

• **Meta** launched about $25B of dollar and euro bonds on election day. Investment-grade funding is available, but issuers are sizing deals more carefully as AI capex draws scrutiny. Bloomberg

• **Google TPUs**: TPU 8tx targets confidential inference and TPU 8i Max long-context workloads, with availability planned next year. Four TPU systems in one year is a cadence aimed at procurement teams looking for a second source.**Bloomberg**

• **Google / Crusoe Wyoming**: Google bought the Laramie County site Crusoe had prepared and outlined a $17B investment, after Crusoe was unable to sign customers on its own terms. The $17B is Google's build plan, not the purchase price. Bloomberg

• **Cerebras** gave a stronger outlook, reinforcing the market for specialized accelerators and for procurement that is not solely Nvidia-centric. Bloomberg

• **Hut 8** fully leased its Beacon Point campus and has 1,330 MW of utility capacity under construction: 330 MW at River Bend and 1,000 MW at Beacon Point. First data-hall deliveries run from the second quarter of 2027 to the second quarter of 2028. Hut 8 Q3

• **Lambda** plans a $33.1B campus in Lowndes County, Alabama, developed with Cloverleaf, with construction starting in early 2027 and service from Alabama Power pending regulatory approval. Lambda says it will pay the full cost of power and grid infrastructure. **Lambda**

• **Volta Infrastructure** priced $5B of debt for a Norwegian campus above 11%, the only leveraged AI financing Morgan Stanley counted in October. It is the clearest current price for first-time developer risk. Semafor

CAPITAL MARKET READ-THROUGH | WHAT CLEARS NOW

$1.4T ANTHROPIC IPO VALUE fully diluted, top of range	**$25B** META BOND PROGRAM dollars and euros	**$17B** GOOGLE WYOMING PLAN site acquired from Crusoe	**1,330 MW** HUT 8 UNDER CONSTRUCTION River Bend and Beacon Point

ANALYST FILTER: Capacity under exclusivity, GPU commitments and fully operational halls are three different units of economic value. Creditworthy tenancy and delivery covenants determine whether contracted revenue can support project debt.

WEEKLY ROUNDUP | GAS, GENERATION, POLICY AND MODULAR CAPACITY

• **SpaceX Starbase**: a proposed gas-fired power plant and super-compute facility with about $24B of initial-phase investment on a 444-acre tract. The city commission hears the tax-abatement and development agreements on December 9. The project is self-supplied gas in a state whose permitting pause is about to be tested. Bloomberg
• **Anthropic / OnePWR**: the FT reports a $3.4B deal for 1.7 GW of Caterpillar generator orders plus installation capability, the largest known equipment purchase by an AI lab. Frontier labs are taking direct control of power procurement. Bloomberg
• **SoftBank** booked a $3.7B loss on U.S. power-equipment commitments it will not take up, about $2.9B of it forfeited deposits. It says its Ohio campus is unaffected. Bloomberg
• **Williams** reported adjusted EBITDA up 6% to $2.039B and brought its Socrates power project fully online early. Pairing gas, generation and a contracted customer is winning capital. Williams
• **Oracle Project Jupiter:** developer Yucca Growth waived a November 23 New Mexico air-permit decision deadline for its gas-fueled fuel-cell microgrid. Air permitting, not equipment, is setting the schedule. Bloomberg
• **PSEG / Constellation:** a planned 200 MW Salem uprate would add nuclear supply, subject to approvals and to an extended outage now under review at Salem 1. Utility Dive

• **PPL** lifted its 2027-2030 base capital plan to $25B and proposed a 645 MW combined-cycle unit in Kentucky, subject to approval. Its Pennsylvania advanced-stage pipeline reached 35.3 GW. Utility Dive
• **Oklo** reported $3.1B of cash and marketable securities supporting its Aurora and fuel programs. Commercial reactor dates remain execution milestones rather than commitments. Benzinga
• **Siemens** booked more than 8.5B euros of fiscal-2026 data center orders and raised growth targets despite the prospect of near-term permitting friction in the U.S. Bloomberg
• **Mitsubishi Electric** is expanding in power-trading software and grid components to deepen its North American utility exposure. Utility Dive
• **Reused aircraft turbines** offer a fast-power option, but their efficiency and emissions profile bring material permitting risk, particularly where air permits are already the constraint. NYT
• **PJM** market monitor put data center capacity costs at $29.4B over four auctions and warned of $5-$10B more in December, sharpening the tariff debate. PJM IMM
• **TVA** signed a $1.7B non-refundable capacity commitment with one data center customer at about $1.5M per MW, the first disclosed contract under its new charge. TVA 10-K

• **Local ballot measures:** voters sided against data center development in 40 of 41 local measures on November 3, including all 21 in Ohio. CNBC
• **ERCOT** chief executive Pablo Vegas called for authority to curtail large loads earlier, before emergency-stage thresholds are reached.Bloomberg
• **Microsoft** pledged to cover the power and grid costs of its data centers rather than shift incremental expense to existing customers. Bloomberg
• **OpenAI** said it will limit nondisclosure agreements and disclose more on water, energy, noise and local benefits at its sites. Bloomberg
• Norway paused new data center grid reservations, expected to lift by August 1, 2027, ahead of a licensing regime. Bloomberg
• **Malaysia** is developing a dedicated wholesale electricity market for large users, including data centers. Bloomberg
• **Torus** raised $500M to commercialize 1-20 MW battery-linked inference modules that use existing site power. **Bloomberg**
• **Nvidia / Apollo**: a proposed conversion of Brightspeed telecom buildings could turn an estimated 1 GW of dispersed power into inference sites. **The Information**

POLICY & EXECUTION DASHBOARD

DEC. 9	DEC. 10	DECEMBER	JAN. 19
STARBASE HEARING SpaceX abatement and 380 agreement	TEXAS AUDIT REPORT ERCOT / PUC data center queue	PJM CAPACITY AUCTION 2029/30 delivery year	TEXAS INAUGURATION Legislature convenes Jan. 12

ABOUT DIGITAL POWER DIGEST

Digital Power Digest is the institutional intelligence briefing from Keel Infrastructure, a digital infrastructure and energy company that develops and owns data centers and energy infrastructure for high-performance computing workloads, including AI. It covers the intersection of power markets and digital infrastructure - interconnection, generation, gas supply, capital markets, equipment, regulation and the physical AI stack - and is edited by Chris Ruppel, SVP - Power. Analysis reflects public information and the editor's judgment as of the issue date. For informational purposes only; not investment advice.