KEEL INFRASTRUCTURE

# DIGITAL POWER DIGEST

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## WEEK IN REVIEW

### *The Market Splits Large Load Into Firm and Curtailable*

The last two weeks changed the large-load bargain. The center of the story is not another general statement that data centers need power; that has been obvious for months. The new development is that regulators are beginning to translate that fact into two distinct products: load that is backed by deliverable incremental capacity and therefore can claim something close to firm service, and load that is not backed and therefore becomes curtailable, lower-priority, or subject to additional backstop cost. Existing power ESAs are effectively being re-traded into a new reliability contract with new terms: registry disclosure, cost responsibility, curtailment priority, coverage obligations, compensation mechanics, and community consent.

**PJM supplied the wholesale template.** In its show-cause posture, PJM is pointing FERC to a two-filing architecture: the Reliability Backstop Procurement filing and the Interim Resource Adequacy Service / Large Load Registry filing. The IRAS filing creates a mandatory registry for loads of 50 MW or more; treats post-June 1, 2027 increments as New Large Load; and exposes any residual load not covered by Bring Your Own New Capacity or allocated RBP UCAP to pre-emergency reduction through the electric distributor. Beginning with the 2029/2030 capacity auction, uncovered incremental New Large Load is removed from the VRR demand curve. That is the important market-design move: the system stops procuring full capacity for uncovered load and instead prices the gap through curtailment risk.

**Pennsylvania supplied the retail and siting template.** Governor Shapiro's Executive Order 2026-05 applies to post-August 18 DEP permit activity for data centers over 25 MW, removes data centers from Fast Track, conditions new Computer Data Center Equipment tax-exemption applications on GRID compliance, and directs the Special Counsel to seek PUC tariffs under which data centers are curtailed before any other customer unless they have secured incremental capacity for the entirety of their demand. It also front-loads local approvals: DEP review or permit issuance is now tied to comprehensive-plan consistency and municipal approvals. For townships without sophisticated data center zoning ordinances, that is a major shift. The state is handing local communities a more formal point of leverage over whether, and on what terms, a facility enters the community.

**Texas supplied the verification template.** The PUCT's August 20 order did not simply 'end' or 'extend' a moratorium; it gave ERCOT good-cause relief to pause Batch Zero classification while ERCOT verifies the queue. ERCOT is targeting December 10 to file both the Batch Zero Eligibility Verification Report and the Community Impact Review Report, with the December 17 open meeting as the next Commission checkpoint. The distinction matters: December 10 is ERCOT's public implementation target, not a date written into the order, but the sequencing is binding - Batch Zero cannot continue until verification and reporting occur. The funnel is stark: roughly 474 GW of large-load requests narrows to a roughly 200 GW Batch Zero verification universe and only 23 projects / 8.833 GW in the H1 2027 QSA bridge.

**The combined read-through is that capacity coverage is becoming the expensive version of electricity.** A data center with recognized incremental capacity, locational deliverability, cost responsibility, and local support can sell a materially different reliability product than one that simply holds a queue position or an old service agreement. The market is beginning to sketch the price spread between non-curtailable and curtailable load: BYONC capacity, RBP allocations, utility riders, collateral, take-or-pay supply, backstop charges, and community-benefit commitments all become part of the delivered cost of firm service.

**This is a continuation of the earlier proof-of-power theme, but it is more specific and more investable.** The question is no longer just whether a project has power. It is what class of power service the project actually has. Firm, covered load should command a premium and finance more easily; uncovered load may still be buildable, but it is becoming a different product with a lower reliability claim, higher operational burden, and a cost stack that is no longer safely hidden inside the utility tariff. The winners will be projects that can prove they are in the first class before lenders, tenants, regulators and local governments force them into the second.

### WHAT CHNAGED IN THE CONTRACT

| REGIME | NEW TERM | MARKET READ-THROUGH |
|---|---|---|
| PJM | 50 MW registry; post-June 1, 2027 uncovered load faces IRAS. | Load splits into covered/non-curtailable and uncovered/curtailable classes. |
| Pensylvania | Local approvals + full-demand capacity coverage become permit/tariff gates. | Municipal leverage and community benefits enter the power bargain. |
| Texas | Batch Zero paused until verification/audit reports; Dec. 10 target. | Queue MW is discounted until documentation, models and site readiness are proven. |

| | | | |
|---|---|---|---|
| **50 MW** PJMLAREG LOAD REGISTRY TRIGGER | **JUNE 1, 2027** PJM NEW LARGE LOAD LINE | **DEC. 10** ERCOT VERIFICATION TARGET | **25 MW** PA EO DATA CENTER PERMIT TRIGGER |

## CHARTS | THREE RULES OF THE NEW LOAD CONTRACT

| Texas funnel: queue to executable cohort | PA clean-firm ramp | Dynamic model quality |
|---|---|---|
| 474 GW → ~200 GW → 8.833 GW<br>ERCOT queue → Batch Zero verification → H1 2027 QSA bridge | 10% → 14.5% → 32%<br>2027 → 2030 → 2035 | 290 → ~18%<br>Reviewed → acceptable first pass |

The charts point to one market structure: raw demand is being discounted, qualifying capacity earns a premium, and model quality now gates schedule.

*Sources: PJM/FERC filings; Pennsylvania EO/GRID; PUCT/ERCOT; public reporting. Charts: Digital Power Digest.*

## MARKET SPOTLIGHT | FEATURED ANALYSES

### THE LARGE-LOAD ESA IS BEING RE-TRADED

**Legacy service rights are being rewritten by new curtailment, capacity and community terms**

The through-line across PJM, Pennsylvania and Texas is not simply that regulators want data centers to bring power. It is that the old service agreement is no longer the entire bargain. Large loads are being sorted into classes. Covered load can point to recognized incremental capacity, cost responsibility, local approvals and operating compliance. Uncovered load can still seek service, but it faces curtailment, backstop cost, verification delay, lower priority or all of the above.

| COVERED<br>INCREMENTAL CAPACITY + COST RESPONSIBILITY | UNCOVERED<br>CURTAILMENT / BACKSTOP / DELAY RISK | LOCAL<br>APPROVALS MOVE AHEAD OF PERMITS | MODEL<br>DYNAMIC DATA GATES SCHEDULE |
|---|---|---|---|

| OLD ESA QUESTION | NEW LARGE-LOAD QUESTION | ECONOMIC RESULT |
|---|---|---|
| How many MW can the utility serve? | Which MW are covered by accredited incremental capacity? | Non-curtailable service commands a premium. |
| What is the energization date? | What verification, local approval, QSA or registry gate applies? | Schedule value shifts to documented readiness. |
| Who pays the tariffed bill? | Who pays but-for generation, transmission, distribution and backstop costs? | Cost socialization is being reduced. |
| Can backup generators run? | Do permits allow non-emergency IRAS/runtime use? | Engine runtime becomes a compliance constraint. |

### BOTTOM LINE

This is the first visible outline of a price spread between firm and curtailable data center load. The covered product has higher explicit cost but lower interruption and financing risk. The uncovered product preserves optionality but loses the old assumption that utility service is automatically firm, socialized and politically durable.

## PJM MAKES CURTAILABILITY A SERVICE CLASS

### The show-cause response architecture splits covered load from uncovered residual load

PJM's response to FERC's large-load show-cause proceeding is not a single rule; it is a new service architecture. The grid operator did not ask for the kind of abeyance sought by several peers. Instead, it advanced a parallel package: Reliability Backstop Procurement to source new accredited capacity and IRAS / Large Load Registry to classify, report and curtail uncovered load. That combination begins to turn the old binary of 'connected' or 'not connected' into a more nuanced distinction between covered and uncovered service.

| | | | |
|---|---|---|---|
| **50 MW**<br>REGISTRY TRIGGER | **JUNE 1, 2027**<br>NEW LARGE LOAD CUTOFF | **50% CP**<br>IRAS COMPENSATION CEILING | **2029/30**<br>VRR CURVE CHANGE |

#### THE REGISTRY IS THE NEW STARTING POINT

Any end-use load with cumulative peak demand of 50 MW or greater at a single site enters the Large Load Registry. Aggregation is deliberate: phased buildings, multiple tenants, multiple POIs and backup generation do not let a large campus disappear into fragments. Registry data becomes the factual substrate for planning, retail allocation and future capacity treatment.

#### THE TEMPORAL LINE IS JUNE 1, 2027

Under the IRAS filing, a Large Load or increment going into service after June 1, 2027 becomes New Large Load. A phased campus can therefore straddle the line. Pre-date increments may keep legacy treatment, while later increments must show coverage or accept IRAS exposure. That is why legacy ESAs are not really frozen contracts anymore; their later ramps need a new capacity and curtailment rider.

#### THE CURTAILABLE CLASS IS THE UNCOVERED RESIDUAL

New Large Load net of BYONC arrangements or allocated RBP UCAP becomes Eligible New Large Load and can be reduced through the electric distributor before pre-emergency load management. Compensation is capped at 50% of the Capacity Performance non-performance charge rate and may be reduced or waived through retail implementation. The filing contains no express annual-hour, event-duration or seasonal cap; actual exposure will depend on system conditions, zonal allocation and retail implementation.

#### CAPACITY MARKET DESIGN DOES THE REAL ECONOMIC WORK

Beginning with the 2029/2030 BRA, uncovered New Large Load is removed from the VRR demand curve. That means the market does not simply procure capacity for every incremental megawatt and socialize the bill. The uncovered increment becomes a curtailed reliability product unless it buys, brings or receives qualifying capacity. This is where the spread between non-curtailable and curtailable load begins to form.

#### BACKUP GENERATION IS NOT A FREE OPTION

Running engines through IRAS is not automatically unlimited emergency operation. PJM terminology does not control Clean Air Act classification. If an operator plans to ride through curtailment on engines, the strategy must be reconciled with federal engine rules, state permits, permitted non-emergency hours, site emissions limits and any utility-service-interruption theory. That makes BESS, accredited capacity coverage and clear retail terms more valuable than a generic 'just run the generators' assumption.

| TERM | OLD ASSUMPTION | NEW NEGOTIATION |
|---|---|---|
| Capacity coverage | Embedded in utility/RPM planning | BYONC/RBP UCAP, accredited and timed by Delivery Year |
| Curtailment | Emergency or extraordinary | Pre-emergency IRAS exposure for uncovered residual load |
| Compensation | Generic interruption economics | Capped, retail-implemented, potentially waived or reduced |
| Backup generation | Tenant resilience asset | Air-permitting and non-emergency-hour constraint |

*Sources: PJM ER26-3515 IRAS filing; PJM ER26-3380 RBP filing; FERC show-cause docket materials; public reporting.*

## PENNSYLVANIA PUTS LOCAL CONSENT INTO THE POWER CONTRACT

**Shapiro EO 2026-05 ties DEP permits, GRID compliance and curtailment priority to municipal approval**

Pennsylvania's order joins wholesale capacity reform to local land-use authority. The Executive Order does not merely say that data centers should bring power. It changes the permitting path, ties state tax treatment to GRID compliance, directs a curtailment-first retail tariff for unsecured load, and requires local approvals before DEP can move at full speed. In practice, it pushes the power ESA, municipal approvals, equipment tax treatment and community-benefit package into the same negotiation.

| | | | |
|---|---|---|---|
| **25 MW**<br>DATA CENTER PERMIT TRIGGER | **100%**<br>DEMAND COVERAGE NEEDED FOR EXCEPTION | **10/14.5/32%**<br>CLEAN-FIRM RAMP | **JULY 1, 2027**<br>ANNUAL REPORTING START |

### THE EO TURNS LOCAL APPROVAL INTO A FRONT-END GATE

For post-August 18 permit applications by data centers above 25 MW, local comprehensive-plan consistency and required municipal approvals now determine how DEP review proceeds. A COA applicant can obtain rolling review but cannot receive qualifying permits until local approvals are documented. A non-COA applicant cannot even start DEP review until local approvals and key water authorizations are in hand. This gives local governments - including municipalities without elaborate zoning regimes - a practical veto point or bargaining point before state permits are issued.

### GRID MAKES FULL-COST POWER THE DEFAULT CASE

GRID requires the project to build, bring or buy incremental electric capacity matching its ramp, generally in the same PJM LDA, and to pay the energy, ancillary, transmission, distribution, network-upgrade and dedicated-facility costs caused by the project. It also layers in a clean-firm ramp: 10% beginning in 2027, 14.5% in 2030 and 32% in 2035, subject to final implementation details. The cost of firm service therefore moves from a generic utility bill into a project-specific power plan.

### THE CURTAILMENT TEST IS BINARY AS ADVOCATED

The Executive Order directs the Governor's Special Counsel to seek PUC tariffs under which data centers are curtailed before any other customer in pre-emergency IRAS or emergency load-control events unless the data center has secured incremental capacity for the entirety of its demand. Partial securing may reduce economics or exposure, but the advocated rule's exception is all-or-nothing. This is the clearest statement yet that non-curtailable service will cost more because it has to be fully covered.

### COMMUNITY BENEFITS MOVE FROM OPTICS TO PERMITTING

GRID's community engagement package includes early municipal consultation, public meetings, end-user disclosure, footprint information, water use and source, PUE/WUE, workforce commitments, prevailing-wage construction jobs, local-hire and apprenticeship plans, traffic/noise/lighting/air-quality mitigation, emergency management, aesthetics and financial contributions. That is not public relations. It is now part of the project operating license.

### THE TAX EXEMPTION BECOMES A COMPLIANCE LEVER

The EO conditions new Computer Data Center Equipment sales/use-tax exemption applications on GRID compliance and removes data centers from Pennsylvania Permit Fast Track. It also creates annual energy, natural-gas, water and environmental reporting beginning July 1, 2027. Quiet entitlement lock-in becomes harder when the project must disclose parent-company identity, monthly energy and gas consumption, water source and mitigation measures.

### THE NEW PENNSYLVANIA PERMITTING LADDER

| PATH | WHAT HAPPENS | LOCAL LEVERAGE |
|---|---|---|
| COA/ GRID path | DEP may review on a rolling basis but cannot issue qualifying permits until local approvals are documented. | Municipal approval becomes a pre-issuance gate |
| Non-COA path | DEP review does not begin until local approvals and key water permits are in hand; no rolling issuance. | Local process becomes rate-limiting. |
| Private credit / structuredPUC retail track | Special Counsel seeks curtailment-first tariffs for unsecured data centers. | Community and ratepayer protection become tariff design. |

*Sources: Pennsylvania Executive Order 2026-05; GRID standards; public reporting. Analysis reflects filed/executed documents and pending PUC implementation.*

## TEXAS TURNS THE MORATORIUM INTO A VERIFICATION GATE

**The PUCT order pauses Batch Zero until ERCOT proves which load is real, ready and supportable**

Texas is still not a simple moratorium story. The PUCT's August 20 action pauses Batch Zero long enough to verify who is real, who is ready and who can support the representations made to enter the process. That makes the December target commercially important even though it is not a hard date written into the signed order. The instrument is different from PJM and Pennsylvania, but the direction is the same: speculative queue positions are being discounted; documented, sited, funded and utility-supported load gains value.

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|---|---|---|---|
| **474 GW**<br>TOTAL LARGE-LOAD QUEUE | **~200 GW**<br>BATCH ZERO VERIFICATION UNIVERSE | **8.833 GW**<br>CLEAN-FIRM RAMP | **18%**<br>FIRST-PASS MODEL ACCEPTANCE |

### THE ORDER IS NARROWER THAN THE HEADLINE

The PUCT granted three good-cause exceptions: a delay of Batch Zero Large Load classification, a QSA bridge that lets eligible-but-unclassified base-load candidates remain in the August and November stability assessments, and continued dynamic-data review with a 24-day cure period for deficiencies identified after the original deadline. The order itself contains no December dates and no new classification framework.

### DECEMBER 10 IS A TARGET; THE SEQUENCING IS THE LAW

ERCOT told the Commission it is targeting December 10 to file the Batch Zero Eligibility Verification Report and the Community Impact Review Report, with the December 17 PUCT open meeting as the next checkpoint. A slip would not breach an express December deadline in the order. But Batch Zero still cannot continue until ERCOT completes verification and reports the results, and the unchanged April 9, 2027 study deadline would immediately come under pressure.

### THE FUNNEL IS THE STORY

The broad ERCOT queue is roughly 474 GW, about 90% data centers. The Batch Zero verification universe is roughly 250-300 projects representing about 200 GW. The H1 2027 QSA bridge is only 23 projects totaling 8,833 MW: six projects / 1,959 MW for Q1 and 17 projects / 6,874 MW potentially for Q2. Texas is reducing a headline market into an executable cohort.

### COMMUNITY IMPACT BECOMES PART OF GRID READINESS

The Community Impact Review covers medium computational loads of 25-75 MW and relevant Batch Zero large computational loads. It collects data on public incentives, grid versus onsite power supply, projected electricity and water use, cooling technology, ownership and mitigation for noise, light, setbacks and traffic. That record will feed the Commission, Governor and Legislature ahead of the 2027 session.

### MODEL QUALITY IS A SCHEDULE CONSTRAINT

ERCOT reported that 290 dynamic models had been reviewed and only about 18% were acceptable on first review. This is not a paperwork footnote. Model quality affects processing capacity, stability assessments and energization. In the new regime, readiness means the financial package, site control, utility agreement and dynamic model all have to be real at the same time.

### TEXAS TIMELINE

| DATE | EVENT | READ-THROUGH |
|---|---|---|
| Aug 20, 2026 | PUCT grants good-cause exceptions; ERCOT presents Dec. 10 target. | Pause becomes verification process. |
| Dec 10, 2026 | ERCOT target for Eligibility Verification and Community Impact reports. | Public target, not express order deadline. |
| Dec 17, 2026 | Next Commission checkpoint after reports. | Potential restart signal or slippage marker. |
| Apr 9, 2027 | Batch Zero study results deadline remains unchanged. | December slip pressures the study schedule. |

Sources: PUCT Project No. 59142; ERCOT presentations/filings; Texas public reporting.

## FIRM LOAD GETS A DIFFERENT COST OF CAPITAL

**The financing market starts to price the spread between covered and curtailable megawatts**

The capacity split is emerging at the same moment Wall Street is trying to finance an unprecedented AI infrastructure balance sheet. The WSJ's estimate of roughly $3 trillion of off-balance-sheet commitments across nine technology companies shows that future data center leases, chip obligations and energy agreements are already embedded in the system even when reported capex understates the total. That capital is still available, but it is becoming more sensitive to service class: firm, covered megawatts finance differently than curtailable, unverified or politically fragile megawatts.

| | | | |
|---|---|---|---|
| **$3T**<br>OFF-BALANCE AI COMMITMENTS | **$500B**<br>COMPUTE-FINANCING TARGET | **5.33%**<br>U.S. 30-YEAR TREASURY PEAK | **7.228%**<br>QTS MICROSOFT-LINKED YIELD |

### FIRM LOAD IS THE PREMIUM PRODUCT

A covered load with accredited capacity, local approvals, utility cost responsibility and a clear curtailment exemption has a better credit story than a load relying on ordinary tariff service. Lenders can underwrite revenue duration and service reliability. Tenants can underwrite uptime. Utilities can show who pays. Local officials can show community consideration. That package costs more, but it is also more financeable.

### CURTAILABLE LOAD IS NOT WORTH ZERO - BUT IT IS DIFFERENT

Curtailable data center service can still be useful for flexible workloads, batch processing, training schedules with rescheduling rights, or tenants willing to self-insure with storage and generation. But it should not be priced like firm service. Its lease, SLA, backup-generation strategy, tax assumptions and debt package all need to reflect interruption exposure and uncertain compensation.

### THE SHADOW CAPEX STACK MAKES SERVICE QUALITY SYSTEMIC

Nvidia and asset managers are trying to create compute-financing platforms that could reach $500 billion, while hyperscalers and AI labs carry enormous off-balance commitments. If a large portion of financed capacity turns out to be curtailable or delayed by local approvals, that risk does not sit only with the developer. It can transmit into tenants, chip financings, structured credit, data center bonds and utility resource plans.

### LONG-RATE PRESSURE RAISES THE BAR

Thirty-year Treasury yields touched 5.33%, and AI-linked project debt has already needed yields that look more like high yield than ordinary utility paper. The spread between covered and uncovered power therefore becomes both an operating spread and a financing spread. In a higher-rate market, proof of service quality is not optional; it is part of the cost of capital.

### CREDIT READ-THROUGH

| LOAD PRODUCT | WHAT CLEARS | WHAT GETS PENALIZED |
|---|---|---|
| Covered / non-curtailable | Accredited capacity, full-cost tariff, local approvals, controllability | Higher upfront cost, but stronger tenant and lender story |
| Curtailable / uncovered | Flexible workloads, short-term compute, storage-backed operations | Lower reliability claim, weaker leverage, SLA and permit risk |
| Unverified queue MW | Optionality only | Security, audit, community and model-quality gates |

Sources: WSJ; Bloomberg; The Information; company filings; public financing reports.

## SOCIAL LICENSE AND GRID BEHAVIOR ENTER THE SAME DILIGENCE CHECKLIST

**Community approval, ratepayer protection, ride-through and dynamic models converge**

Social license is no longer a narrative overlay on the AI buildout. It is now a routing constraint for capital. The same two-class logic showing up in PJM and Pennsylvania is appearing politically: communities increasingly distinguish projects that pay their own way, disclose their impacts, and offer local benefits from projects that arrive with NDAs, tax incentives and utility-cost ambiguity. The result is a new community economics test.

| | | | |
|---|---|---|---|
| **60%+** | **$1.3B** | **$26.48M** | **3.8 GW** |
| OPPOSE NEW LOCAL DATA CENTERS | LOUDOUN EXPECTED DC TAX REVENUE | KENTUCKY LAND OFFER REFUSED | PJM LOAD TRIP EVENT |

### LOCALITIES ARE GETTING A REALER SAY

Pennsylvania's order is important because it gives municipalities a state-backed role even where local zoning codes were not written for hyperscale data centers. Local comprehensive-plan consistency, municipal approvals and community-benefit standards are now part of the sequencing. Similar dynamics are appearing nationally through recall elections, moratoria, ratepayer-protection bills and tax-incentive scrutiny.

### RATEPAYER PROTECTION IS THE POLITICAL LANGUAGE

The most durable public argument is not that data centers are bad or good. It is that non-data center customers should not fund the infrastructure, backstop capacity or grid risk created by a private load. That framing is bipartisan because it converts an abstract AI debate into household bills, local water and county taxes.

### LOUDOUN SHOWS BOTH SIDES OF THE BARGAIN

Loudoun County's data center equipment-tax revenue is expected around $1.3 billion, roughly 40% of county tax revenue, and residential property-tax rates have fallen materially over time. Yet even there officials are debating dependence, land use and concentration. The lesson is that tax revenue helps, but it does not permanently settle the community contract.

### THE OPPOSITION IS ORGANIZED AND CROSS-PARTISAN

More than 60% of Americans now oppose new local data centers. In Kentucky, landowners rejected $26.48 million for a 2.2 GW campus. In Independence, Missouri, residents gathered more than 1,200 signatures for a recall after officials approved incentives for a massive data center project. Political durability has become diligence, not a communications afterthought.

### GRID BEHAVIOR BECOMES PART OF THE COMMUNITY BARGAIN

The same re-trading is also happening inside the electrical model. A load that cannot ride through routine faults, provide dynamic data, or coordinate backup transfers may not deserve the same interconnection treatment as a conventional industrial customer. PJM's July 22 Dominion-zone event, in which roughly 3.8 GW of data center load disconnected during a normally cleared fault, is pushing computational load toward its own reliability standard.

### RIDE-THROUGH IS BECOMING A CONDITION OF SCALE

During the July 22 event, load dropped in two waves and PJM recovered its control-error limit within nine minutes. But the more important point was PJM's diagnosis: the facilities should not have disconnected from a normally cleared fault. Ride-through settings, telemetry and protection coordination are now part of how large loads earn their place on the grid.

### DYNAMIC MODELS ARE NO LONGER OPTIONAL

ERCOT's 18% first-pass acceptance rate on dynamic models reinforces the same point from another market. A data center with poor models imposes processing and reliability costs even before it energizes. In the new regime, a static MW forecast is not enough; operators need to know how the load behaves during voltage events, frequency movement, transfers and rapid ramping.

### THE CAMPUS IS BECOMING ONE ELECTRICAL MACHINE

Generation, storage, UPS, 800 VDC distribution, cooling, transfer schemes and grid protection have to be studied together. That is why the service-class split matters technically as well as financially. Firm load is not just load with a bigger checkbook; it is load that can demonstrate controllability and compliance.

Sources: PJM; Utility Dive; PUCT/ERCOT; Data Center Richness/OCP; WSJ; NYT; Bloomberg; CNBC

# WEEKLY ROUNDUP

## THIRTY STORIES, ONE PHYSICAL STACK

### The week's top stories, itemized- each with its own read-through

**1. Nvidia ties power rights to the hardware bundle:** Nvidia is investing across powered-land developers such as Cloverleaf, Lancium and SB Energy while using lease and chip-exclusivity structures to steer future AI campuses toward its stack. Read-through: the chip supplier is underwriting the grid positions needed to keep chip demand from becoming stranded. (The Information / Bloomberg / WSJ)

**2. OpenAI Ohio resets the scale of AI campus finance:** OpenAI signed a 10 GW, 20-year lease with SB Energy, with Nvidia support for the first 4.25 GW phase potentially reaching $105 billion. Read-through: the structure packages tenant credit, hardware exclusivity and powered-site development into one financing product. (WSJ / Bloomberg)

**3. NextEra pushes 10 GW of gas for data center demand:** NextEra is pursuing up to 10 GW of new gas generation in Texas and Pennsylvania, backed initially by $3.3 billion of state funding support. Read-through: utility-scale gas has become the near-term bridge between AI load growth and grid interconnection reality. (DCD)

**4. Mitsubishi turbine backlog reaches 35 GW:** Large-frame gas turbine orders are now being scheduled for 2028-2030 even as the company expands manufacturing. Read-through: a data center with a gas plan still needs a turbine slot; equipment delivery is now part of site control. (Utility Dive)

**5. SpaceX hires into natural-gas trading:** SpaceX is recruiting physical and financial gas-trading expertise while planning generation, pipelines and possibly upstream gas exposure. Read-through: hyperscalers and AI platforms are becoming energy companies because fuel availability is now part of compute reliability. (Bloomberg)

**6. Data center gas could lift U.S. power emissions sharply:** BloombergNEF tracked 99 proposed plants that could emit 318 million tons of CO2 annually at standard utilization. Read-through: behind-the-meter gas accelerates time-to-power, but imports climate, permitting and pipeline risk. (Bloomberg)

**7. Oracle-OpenAI gas pipeline slips:** Project Jupiter's gas pipeline was rejected and rerouted, delaying fuel infrastructure to 2027. Read-through: onsite power avoids some grid queues but still depends on land rights, state approvals and social license for fuel delivery. (Bloomberg)

**8. 800 VDC gets a hyperscaler standardization push:** Nvidia, Google, Microsoft and OCP are aligning around solid-state transformer specs and 800 VDC architectures for higher-density AI racks. Read-through: internal power architecture is becoming a scale constraint and a supplier ecosystem opportunity. (Data Center Richness)

**9. PJM Dominion event accelerates ride-through work:** Roughly 3.8 GW of data center load disconnected after a normally cleared 230-kV fault in northern Virginia. Read-through: large load can no longer be modeled as passive demand; it must prove fault behavior and controllability. (Utility Dive / PJM)

**10. Dominion cost allocation moves toward direct assignment:** Virginia regulators ordered more transmission costs directly assigned to data centers. Read-through: the ratepayer-protection principle is moving from rhetoric into utility cost allocation. (Utility Dive)

**11. Bloom standardizes onsite power:** Bloom Power Connect is intended to cut installation time by more than 40% through standardized fuel-cell, switchgear and control packages. Read-through: onsite power is being productized so it can scale beyond bespoke campus engineering. (Bloom Energy)

**12. ERock books 470 MW of Anthropic demand:** Anthropic ordered 470 MW of onsite natural-gas power equipment, adding to ERock's Meta-linked utility work. Read-through: modular generation is becoming a traded proxy for AI time-to-power. (Source article)

**13. Groq pivots toward inference capacity:** Groq raised $350 million at a $3.5 billion valuation and plans more than 200 MW of capacity next year. Read-through: even chip challengers are gravitating toward the capacity layer where inference demand is tight. (Bloomberg)

**14. Saragon launches around edge inference:** I Squared-backed Saragon launched with 10 facilities, roughly 53 MW installed and up to $1 billion of committed capital. Read-through: inference is creating a metro-capacity thesis distinct from giant training campuses. (Saragon)

**15. CoreWeave faces stronger neocloud competition:** CoreWeave's backlog still exceeds $100 billion, but SpaceX and others are moving aggressively into compute capacity. Read-through: scarcity supports pricing today; competition and renewal risk shape tomorrow's margins. (Bloomberg Opinion)

**16. Nebius and CoreWeave test shorter contracts:** Nebius says three-to-six-month deals can annualize at $40-$50 million per MW, while AWS emphasizes five-plus-year commitments. Read-through: the market is splitting between margin optionality and backlog certainty. (The Information)

**17. Nscale eyes a $3 billion IPO:** The AI cloud firm is preparing a public listing against a large contracted revenue base. Read-through: equity markets are being asked to capitalize future megawatts as much as current earnings. (Bloomberg)

**18. Nebius returns to the convertible market:** Nebius is tapping investors for additional convertible financing. Read-through: neocloud growth still depends on finding capital structures that keep up with GPU and power commitments. (Bloomberg)

# WEEKLY ROUNDUP

**19. QTS clears Microsoft-linked debt at a high yield:** A Microsoft-tied data center bond drew strong orders but yielded 7.228%. Read-through: demand is there, but long-duration AI infrastructure capital is not cheap. (Bloomberg)

**20. Big Tech shadow capex reaches roughly $3 trillion:** Off-balance commitments across major technology companies dwarf reported trailing capex. Read-through: AI infrastructure obligations are larger and more contractual than headline capex suggests. (Wall Street Journal)

**21. KKR frames servers as financeable infrastructure:** KKR says certain AI servers can retain value after six or seven years, but it is avoiding highly levered 30x-earnings assets. Read-through: sophisticated capital is interested, but not indifferent to leverage, renewal risk or counterparty credit. (Bloomberg)

**22. Broadcom debt talks approach utility scale:** Broadcom-related AI chip financing discussions could reach above $60 billion. Read-through: chip finance is becoming infrastructure finance, and residual-value assumptions are doing more credit work. (Bloomberg)

**23. Anthropic expands the balance-sheet race:** Anthropic is arranging a $10 billion-plus credit facility and exploring a record-scale IPO while revenue accelerates. Read-through: model-market winners can command capital, but their power and lease obligations are scaling just as fast. (Bloomberg)

**24. Stripe pays more than $7 billion for OpenRouter:** Stripe acquired the AI model-routing startup to capture token transaction economics across many models. Read-through: if no single model wins, routing and cost optimization become infrastructure-like toll roads on compute consumption. (Wall Street Journal)

**25. Industrials trade at stretched AI multiples:** Industrials now trade near 24.7x forward earnings, above technology and the broader S&P 500. Read-through: equipment scarcity is real, but the valuation already discounts a long runway. (Bloomberg)

**26. Big manufacturers ride the data center equipment cycle:** Electrical and power equipment suppliers are seeing new demand from AI infrastructure. Read-through: the equipment layer captures scarcity premium without tenant, merchant-power or siting risk. (Wall Street Journal)

**27. Loudoun County debates dependence:** Data center equipment taxes are expected to deliver roughly $1.3 billion, about 40% of county tax revenue. Read-through: fiscal upside can lower residential taxes, but concentration risk and local backlash still grow over time. (New York Times)

**28. Kentucky landowners reject $26.48 million:** A mother and daughter rejected a life-changing offer for farmland tied to a 2.2 GW hyperscale campus. Read-through: no spreadsheet fully prices cultural, religious or intergenerational attachment to land. (Wall Street Journal)

**29. Recall politics reaches data centers:** Residents in Independence, Missouri gathered more than 1,200 signatures to recall a councilman after incentives were approved. Read-through: local approvals can become election risk after the vote, not just before it. (New York Times)

**30. Young Americans turn more skeptical of AI:** Nearly three-quarters of adults under 30 now think AI will mean fewer jobs. Read-through: infrastructure opposition may fuse with employment anxiety, widening the coalition against local data center growth. (Bloomberg / Pew)

**ABOUT DIGITAL POWER DIGEST**

Digital Power DIGEST is Keel Infrastructure's institutional intelligence briefing on the intersection of power markets and digital infrastructure — interconnection, generation, gas supply, capital markets and regulation — 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.

# WHAT WE ARE WATCHING

**FERC/PJM:** acceptance, protest and implementation details for RBP and IRAS, including registry timing and retail allocation.

**Pennsylvania PUC:** curtailment-first tariff proposals, cost-allocation rules and local-approval guidance under EO 2026-05.

**ERCOT/PUCT:** Dec. 10 verification reports, Dec. 17 checkpoint, QSA bridge status and any April 9 study-deadline slippage signal.

**ESA re-papering:** whether data center service agreements begin to carry explicit coverage, curtailment, compensation and backup-generation riders.

**Credit markets:** AI project debt concessions as long-duration yields stay high and shadow capex keeps growing.

**Ride-through:** NERC/PJM movement toward computational-load voltage/frequency requirements and dynamic-model standards.

| BY THE NUMBERS \| ISSUE 2 RECAP | |
|---|---|
| **50 MW** - PJM Large Load Registry trigger. | **25 MW** - Pennsylvania EO trigger for data center permit process |
| **June 1, 2027** - proposed PJM New Large Load cutoff. | **100%** - demand coverage needed for the advocated Pennsylvania curtailment exception. |
| **2029/2030** - first BRA where uncovered New Large Load is removed from the VRR curve. | **10% / 14.5% / 32%** - Pennsylvania clean-firm ramp under GRID benchmarks |
| **8.833 GW** - Texas H1 2027 QSA-bridged cohort. | **3.8 GW** - data center load that tripped offline in PJM during the July 22 event. |