

Time-to-Energize: Evidence Gate

AI infrastructure underwriting is moving from announced MW to project-level evidence that load can energize on schedule.

Frame

This note states the thesis, defines the observable clause, names the binding constraint, and lists the evidence that would break the call.

Area	AI infrastructure, grid interconnection, high-voltage execution, and infrastructure diligence
Horizon	2026 to 2028
Issued	2026-06-19
Method	Primary-source review, dated clause, falsifier.

Board summary

The cross-cutting read

Power scarcity for AI is now consensus. The underwritten question is narrower: whether a named AI campus, HVDC line, co-located generation deal, or large-load interconnection can energize on the schedule implied by its public claims. Capital still describes projects in MW, PPAs, land, fiber, turbines, and transformers. The binding constraint is the time-to-energize chain: RTO/ISO tariff treatment, dynamic-load modeling, protection and control requirements, commissioning evidence, certified high-voltage labor, permit status, water and cooling, and official-source proof that the claimed power path exists. The investment question is whether a project is financeable, delayed, contested, or not yet decision-grade.

At a glance

#	Claim	Binding constraint	Case	Call	Resolves
P1	AI campus, HVDC, and large-load capital shifts from believing announced MW to requiring official-source proof that the...	Verified time-to-energize status for each named project: MW, counterparty, power path, interconnection or...	79%	52%	2027-12-31

Case is the strength of the structural thesis. Call is the probability on the exact dated clause.

P1

Time-to-energize evidence becomes the underwriting gate for AI infrastructure.

Domain: AI infrastructure and grid execution

2027-12-31

Structural case	Our call, dated	Resolves
79%	52%	2027-12-31

Large-load demand is rising faster than the grid's permitting, study, protection, control, commissioning, and workforce systems can absorb. Once power scarcity becomes consensus, the scarce decision object moves one layer deeper: verified project evidence that separates real energization paths from press-release power claims.

The boom	AI campus, HVDC, and large-load capital shifts from believing announced MW to requiring official-source proof that the project can energize.
Why it is not priced yet	Power scarcity, transformer delays, and data-center load growth are already widely discussed. What is not yet priced is the evidence-grade status layer: official-source verification of MW, counterparty, power path, tariff or interconnection treatment, dynamic-load requirements, commissioning readiness, high-voltage workforce dependency, and unresolved permits. This is buried in dockets, RTO materials, utility filings, local permits, and reliability alerts rather than in clean market data.
Where the price sits today	No clean liquid instrument captures the thesis. Grid contractors and power developers may already price broad electrification and AI-load demand. The unpriced channel is buyer workflow: infrastructure lenders, landowners, data-center developers, hyperscaler power teams, municipalities, and infra investors paying to avoid underwriting a false energization date.
The binding constraint	Verified time-to-energize status for each named project: MW, counterparty, power path, interconnection or co-location status, dynamic-load/protection requirements, commissioning evidence, certified high-voltage workforce dependency, permit status, water/cooling gate, source tier, retrieved date, watch signal, and kill condition.
What we are watching	By 2027-12-31, at least three public US or EU AI-campus, HVDC, or large-load projects over 200 MW have their claimed energization timeline pushed, conditioned, contested, or demoted in primary or official sources for reasons other than generic generation availability: interconnection tariff treatment, dynamic-load/protection/control requirements, commissioning evidence, certified high-voltage workforce capacity, or unresolved permit and utility-service status.

What would prove us wrong

Kill if by end-2027 large-load projects in the tracked markets mostly clear through ordinary power procurement and interconnection paths, with no repeated official-source evidence that dynamic-load, protection/control, commissioning, high-voltage workforce, tariff, or permit gates materially change energization timing; also kill the commercial wedge if five qualified buyers with live assets say they already have better project-level energization diligence and will not pay for outside verification.

How we tried to break it

The broad AI power story is already consensus and some buyers have internal grid teams. The thesis survives only if we avoid selling generic power scarcity and instead sell project-specific truth: which public claims survive primary-source diligence, which are contested, and which are not decision-grade. If the artifact cannot change a live asset, financing, site, PPA, or municipal decision, it is research theater and should be killed.

Why we are making the call

The evidence stack has converged. DOE/LBNL shows data-center load can double or triple by 2028. FERC has moved from discussion to June 18, 2026 show-cause orders for all six regional grid operators. NERC's Level 3 alert names computational-load modeling, commissioning, protection, and control as action areas. ENTSO-E and National Grid both show that workforce and accreditation are grid-delivery bottlenecks. The power bottleneck is visible; the research edge is verified power-claim and schedule-risk diligence.

If the call is right

Who is exposed

Infrastructure investors, project-finance lenders, data-center developers, hyperscaler power teams, municipalities approving campuses, landowners selling powered sites, power developers, utilities facing large-load requests, and EPC or contractor diligence teams.

Action now

For each named project, record MW, counterparty, power path, interconnection or co-location status, permit and regulatory status, commissioning/protection requirements, high-voltage workforce dependency, water/cooling gate, next official check, and unresolved evidence gaps.

Decision it changes

Do not underwrite or market an AI campus as power-secured until MW, counterparty or offtake, power path, interconnection or co-location treatment, permit/regulatory status, commissioning/protection requirements, and unresolved utility-service gates are source-verified.

ROI / risk logic

One wrong energization assumption can misprice land, debt, equity, power contracts, tenant commitments, municipal approvals, or capex phasing. A small diligence sprint is valuable if it prevents a false schedule, finds a contested docket before investment committee, or identifies the exact question a buyer must ask a utility, EPC, or project sponsor.

Rent accrues to projects and counterparties that can turn public claims into verified schedule evidence, not to generic MW announcements.

Who gains

Buyers with source-grade energization diligence: They can avoid false schedules, negotiate better conditions, and move earlier on genuinely power-secured assets.

Specialist grid contractors, commissioning teams, and high-voltage workforce pipelines: They become visible as the real critical path once hardware and generic power are no longer enough.

Independent diligence teams: They can test sponsor claims against official sources before capital treats announced power as usable capacity.

Who loses

Press-release-deep data-center and power developers: Their public MW claims get demoted when official sources do not verify the power path.

Investors underwriting generic AI-power narratives: They miss project-specific tariff, protection, commissioning, and permit gates that decide time-to-revenue.

Dashboards that track only queues, MW, or equipment: They undercount the human, reliability, and evidence-status gates that actually move schedules.

What reprices

Not a single commodity or equity. What reprices first is project credibility: powered-land premiums, lending reserves, developer valuation, contractor contingency, municipal approval risk, and the willingness to believe a hyperscale campus schedule.

The next constraint it creates

After energization proof, the next constraint is ongoing reliability obligation: dynamic load behavior, ride-through, grid-support commitments, battery smoothing, water/cooling constraints, and who pays for upgrades when large loads change operating profiles.

Earliest sign it has begun

FERC 60-day RTO/ISO tariff responses from June 18, 2026; NERC August 3, 2026 computational-load alert responses; PJM co-location and large-load filings; OPSB/PUCO/SCC/LPSC and local permit

dockets for behind-the-meter generation; project announcements that revise COD or power path; National Grid/ENTSO-E workforce and accreditation updates.

Seeds considered

These cleared the supply-side test but did not make the final board, usually because the trade was not clean or the move was already priced.

Seed	Physical case	Why not promoted
Copper TC/RC inversion	The correction is valuable and near-term, but the capture is event-driven and small. It is a good proof object, not the main company wedge.	The existing board already caught that zero or negative TC/RCs are smelter-margin distress rather than a clean long-refinery rent signal. Useful, but too narrow for the one big roadmap.
Agent authority rails	Structurally strong, but the buyer surface is crowded with identity, governance, and security vendors.	It needs more product invention before the evidence edge is clear. Time-to-energize can be tested immediately through public-source verification.
Critical-minerals refinery bottlenecks	Several calls are excellent constraint-migration theses.	They are longer-horizon and more specialist. The user asked for one thing that can be acted on now with a full capitalization path.

Each call is dated. The line that would prove it wrong is fixed when the board is issued.

Sources and method

Primary source list

ID	Source	URL
		https://www.energy.gov/articles/doe-releases-new-report-evaluating-increase-electricity-demand-data-centers
		https://www.ferc.gov/news-events/news/ferc-launches-aggressive-targeted-action-speed-large-load-integration
		https://www.ferc.gov/rm26-4
		https://www.nerc.com/globalassets/programs/bpsa/alerts/level-3-computational-load-alert.pdf
		https://www.entsoe.eu/european-grids-package/
		https://www.nationalgrid.com/document/562961/download