GCC AI Campus Project Finance with Phased Hyperscaler Commitments

An Evidence-Gated Framework for Power, Buildings, Compute, Tenant Ramp and Debt Conversion

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Abstract

Large artificial-intelligence campuses combine capital programmes that mature at different speeds. Land, power, substations, shells, cooling systems, network routes and security infrastructure can require funding before a hyperscaler accepts capacity. Accelerators and servers can have shorter lives than their buildings. Tenant commitments may become binding only after technical conditions are satisfied and ramp in blocks rather than on one operational date.

This paper develops a GCC AI Campus Project-Finance Framework. It divides a campus into financeable phases and separates site-wide infrastructure from powered shell, mechanical systems, compute equipment and contracted service. It creates an evidence ladder for customer commitments, from demand indications through deposits, reservations, development agreements, leases, minimum-revenue undertakings and parent-supported obligations. It maps power, cooling, equipment, data governance, commissioning and tenant acceptance to financing controls.

The worked case is wholly hypothetical. A 1,000 MW campus is planned in three phases of 200 MW, 300 MW and 500 MW. The first 200 MW phase has an assumed total cost of USD 3.60 billion, including shared enabling infrastructure and compute-ready buildings while tenant-owned accelerators remain outside the project company. The phase is financed with USD 1.60 billion of construction debt, USD 1.40 billion of sponsor equity and USD 600 million of customer deposits and subordinated capacity payments. The tenant commits in four 50 MW blocks. Each block has separate power availability, integrated-system testing, security accreditation, acceptance and billing conditions. The case assumes a 15-month committed-delay facility, a USD 320 million contingency, a USD 260 million interest and operating reserve and a minimum 1.40 times forward debt-service coverage test before conversion. The figures do not describe an identified project, customer, lender or transaction.

The analysis concludes that debt should follow verified capacity rather than the campus masterplan. Site-wide costs require a transparent allocation rule and a funded treatment for later phases. Customer commitments should receive value only to the extent that capacity, price, term, conditions, credit support, termination rights and acceptance mechanics are enforceable. Draws should remain conditional on a balanced budget, current power evidence, long-lead equipment progress, tenant alignment, sufficient remaining funds and a credible route to permanent debt. Downside planning should address delayed power, slower tenant ramp, higher equipment cost, technology change and the possibility that later phases do not proceed.

JEL Classification: G21, G28, G31, G32, L86, L94

Keywords: GCC AI campus, project finance, hyperscaler commitments, data centres, phased delivery, power capacity, compute infrastructure, tenant ramp, construction debt, debt conversion

1. Define the financing perimeter

The decision question is which land, power, buildings, systems, equipment, contracts and cash flows sit inside each borrowing vehicle. The evidence file should begin with entity records, land rights, utility documents, project budgets, customer contracts and ownership schedules. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [1][2]

The principal failure is that a campus-wide narrative obscures which assets and cash flows support a specific loan. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to define a phase-specific legal, physical and cash-flow perimeter before sizing debt. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

2. Create the campus phase map

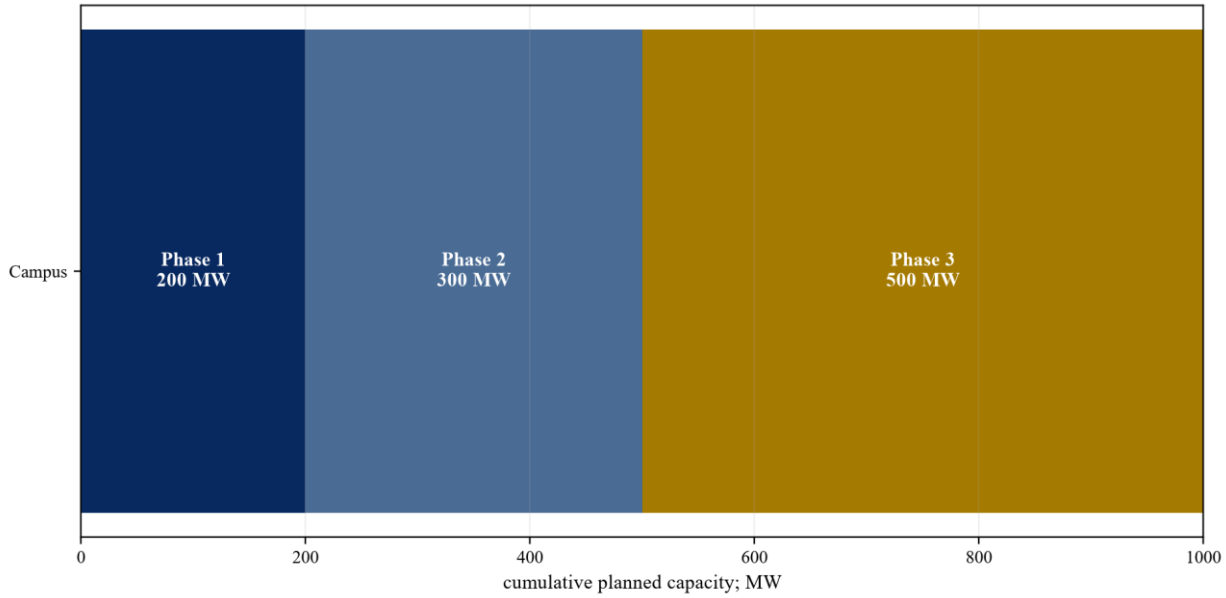
The decision question is how site-wide infrastructure and successive powered-capacity blocks become operational. The evidence file should begin with masterplan, phasing schedule, power programme, design basis, customer ramp and capital plan. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [2][3]

The principal failure is that future phases are treated as committed value while their power, funding or tenants remain conditional. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to separate enabling works, committed phases and optional expansion in every approval and model. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Figure 1. Hypothetical campus phase map



Wholly hypothetical; MW of planned campus capacity.

3. Build a commitment evidence ladder

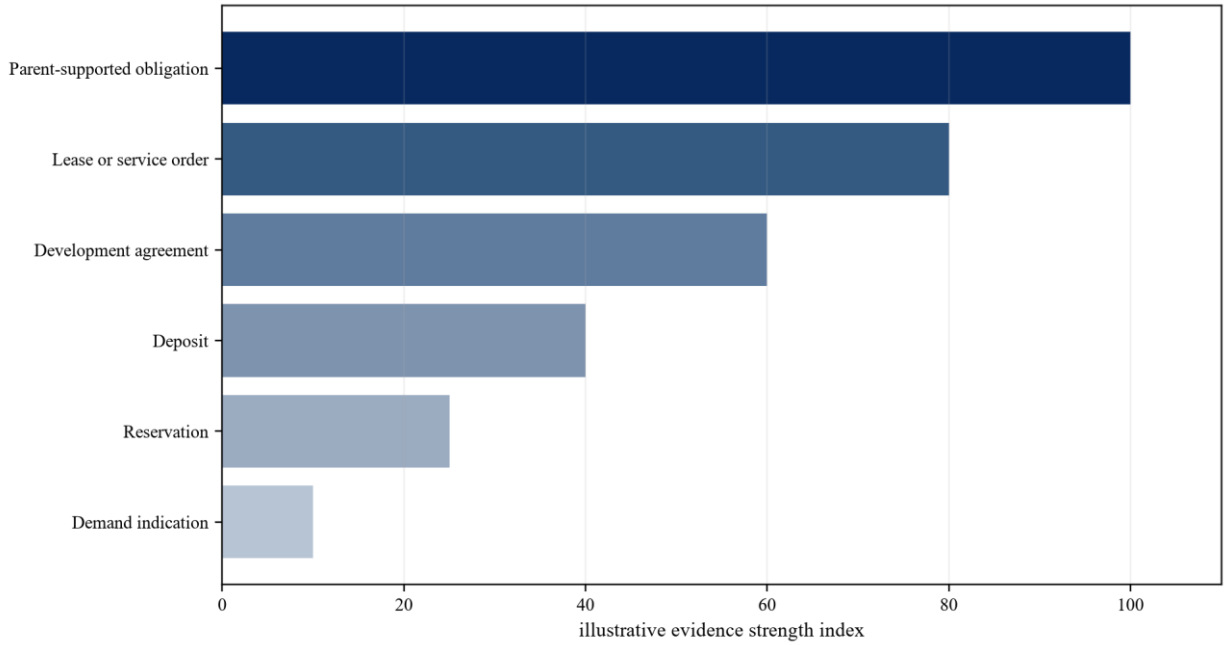
The decision question is which customer documents create demand evidence, enforceable payment and credit support. The evidence file should begin with letters of intent, reservations, deposits, development agreements, leases, service schedules and guarantees. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [5][6]

The principal failure is that headline committed megawatts combine non-binding interest with enforceable obligations. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to classify each commitment by enforceability, conditions, term, price, support and remedy. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Figure 2. Customer commitment evidence ladder



Proposed hierarchy; executed terms and applicable law determine enforceability.

Table 1. Customer commitment evidence ladder

Commitment form	Evidence	Financing treatment
demand indication	non-binding correspondence	market context only
reservation	capacity, expiry and fee	conditional evidence
deposit	funded cash and refund terms	liability-adjusted source
development agreement	milestones and remedies	gated value
lease or service order	enforceable term, price and acceptance	contracted cash subject to conditions
parent-supported obligation	guarantee and obligor capacity	enhanced credit support

Proposed classification; executed documents and applicable law control treatment.

4. Verify customer credit

The decision question is which entity owes payment and what financial capacity or support stands behind it. The evidence file should begin with executed agreement, group structure, audited accounts, ratings, guarantees and security arrangements. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [5][7]

The principal failure is that a recognised hyperscaler brand is treated as equivalent to an obligation of the listed parent. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to underwrite the actual obligor and every limit on guarantee, set-off, termination and liability. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

5. Align capacity blocks and contracts

The decision question is how each customer block maps to a building, power path, cooling system and acceptance test. The evidence file should begin with capacity schedule, design, commissioning plan, customer technical annex and billing provisions. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [2][8]

The principal failure is that contracted demand cannot be tied to a deliverable and testable physical block. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to maintain a block-level capacity ledger connecting construction evidence to contract rights. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Table 2. Capacity-block ledger

Block	Physical evidence	Customer evidence	Cash status
50 MW A	powered shell and tested systems	executed order	acceptance pending
50 MW B	equipment installation	development agreement	deposit funded
50 MW C	long-lead procurement	reservation	conditional
50 MW D	design and power allocation	demand indication	uncommitted
shared systems	commissioned proportionately	allocation agreement	phase funded

Proposed control schedule; each project requires contract-specific entries.

6. Prove the power pathway

The decision question is which generation, grid, transmission, substation and backup arrangements support each phase. The evidence file should begin with connection agreements, power purchase terms, network studies, construction plans, permits and tests. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [1][4]

The principal failure is that nameplate campus power is assumed available before the relevant network and site systems are ready. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to finance only capacity supported by dated rights, works, tests and operating permission. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

7. Test water and cooling resilience

The decision question is which water sources, cooling designs, operating envelopes and redundancy support high-density compute. The evidence file should begin with design basis, water rights, climate data, equipment curves, commissioning tests and contingency plans. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [1][9]

The principal failure is that cooling capacity is sized for average conditions while rack density and peak climate drive failure risk. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to model the tested operating envelope and fund the required redundancy and water strategy. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

8. Rebuild sources and uses

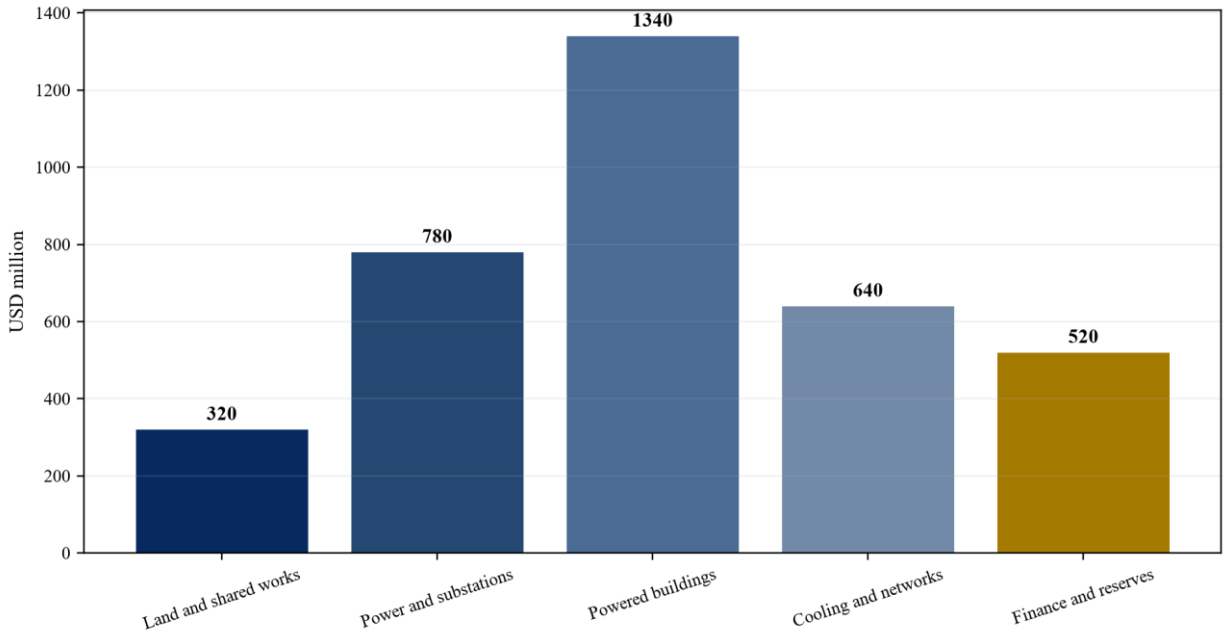
The decision question is how land, shared works, power, buildings, mechanical systems, networks, security, financing and reserves are funded. The evidence file should begin with contracts, cost plans, invoices, utility estimates, procurement terms and sponsor evidence. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [10][11]

The principal failure is that site-wide and later-phase costs are allocated to the first financed phase without a transparent rule. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to reconcile every use to a phase, beneficiary and committed source of funds. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Figure 3. Hypothetical phase-one sources and uses



Wholly hypothetical; USD million.

Table 3. Sources-and-uses controls

Use	Required evidence	Principal control
land and rights	title, lease and permits	security and transfer
power and network	executed rights and programme	milestone reserve
buildings and systems	contracts and certified progress	supervised draw
customer-specific works	approved scope and reimbursement	block allocation
financing and reserves	model and invoices	controlled accounts
contingency	risk register and approval	restricted release

Proposed control schedule; transaction documents determine eligibility.

9. Allocate shared infrastructure

The decision question is how roads, substations, network routes, control rooms and central plants are shared across phases. The evidence file should begin with engineering design, capacity allocation, cost ledger, intercompany agreements and expansion plan. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [10][12]

The principal failure is that the first borrower funds optional expansion without enforceable reimbursement or priority rights. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to apply a documented allocation method and finance later-phase capacity separately. Management estimates may support scenarios when identified as assumptions and reconciled

to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

10. Sequence sponsor and customer funding

The decision question is when equity, deposits, subordinated capacity payments and senior debt enter the project. The evidence file should begin with bank evidence, escrow, deposit terms, equity commitments, subordination and draw schedule. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [13][16]

The principal failure is that customer cash is treated as permanent equity despite refund, set-off or performance conditions. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to classify funding by repayment, priority and conditions and require loss-absorbing cash before debt. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

11. Design construction draw gates

The decision question is which budget, progress, title, power, procurement and tenant evidence permits each advance. The evidence file should begin with draw request, invoices, engineer report, lien controls, budget certificate and milestone dashboard. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [11][14]

The principal failure is that funded exposure increases faster than verified completion and customer readiness. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to condition each draw on current evidence, sufficient remaining funds and no unresolved stop event. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Table 4. Proposed construction draw gate

Gate	Evidence	Stop-draw trigger
budget	balanced sources and uses	funding shortfall
progress	engineer-certified work	material variance
power	current rights, works and tests	delay or scope change
customer	aligned commitment and acceptance	termination or downsizing
equipment	title, inspection and delivery	restriction or failure
liquidity	reserve and sponsor support	minimum cash breach

Proposed lender control; actual conditions require negotiated finance documents.

12. Control long-lead electrical systems

The decision question is which transformers, switchgear, generators, UPS and cooling components determine the delivery path. The evidence file should begin with purchase orders, designs, manufacturing reports, inspections, logistics, title, warranties and spares. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [1][10]

The principal failure is that large deposits are paid before delivery while substitution, delay and ownership remain unclear. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to use milestone payments, vesting, inspection, assignment, insurance and delay remedies. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

13. Separate building and compute risk

The decision question is which party buys, owns, refreshes and insures accelerators, servers and network equipment. The evidence file should begin with customer contract, equipment schedule, procurement terms, title, export approvals and lifecycle plan. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [5][15]

The principal failure is that long-lived project debt funds short-lived compute without contracted refresh or residual-value protection. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to match asset life, ownership and repayment source and isolate equipment exposure where appropriate. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

14. Govern export and technology controls

The decision question is which hardware, software, persons and destinations require approval or continuing compliance. The evidence file should begin with applicable rules, licences, end-user evidence, supply contracts, compliance programme and legal advice. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [15][21]

The principal failure is that restricted equipment is assumed available because commercial orders have been placed. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to make controlled-technology availability and lawful use explicit funding and completion conditions. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

15. Define data and sovereignty controls

The decision question is how data location, access, cybersecurity and operational control affect customer acceptance. The evidence file should begin with data-protection law, security standards, customer schedules, architecture and accreditation evidence. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [21][22]

The principal failure is that a physically complete facility fails contractual or sovereign-control requirements. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to integrate data and security acceptance into design, testing, covenants and change control. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

16. Integrate the construction schedule

The decision question is which civil, power, mechanical, network, security, equipment and customer paths determine delivery. The evidence file should begin with logic-linked programme, critical path, interfaces, float, progress and recovery plans. Each item should record its source, date, legal owner, responsible

party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [10][14]

The principal failure is that separate contractor and customer schedules hide shared dependencies and exhausted float. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to maintain one integrated schedule with evidence owners and lender escalation thresholds. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

17. Define block-level completion

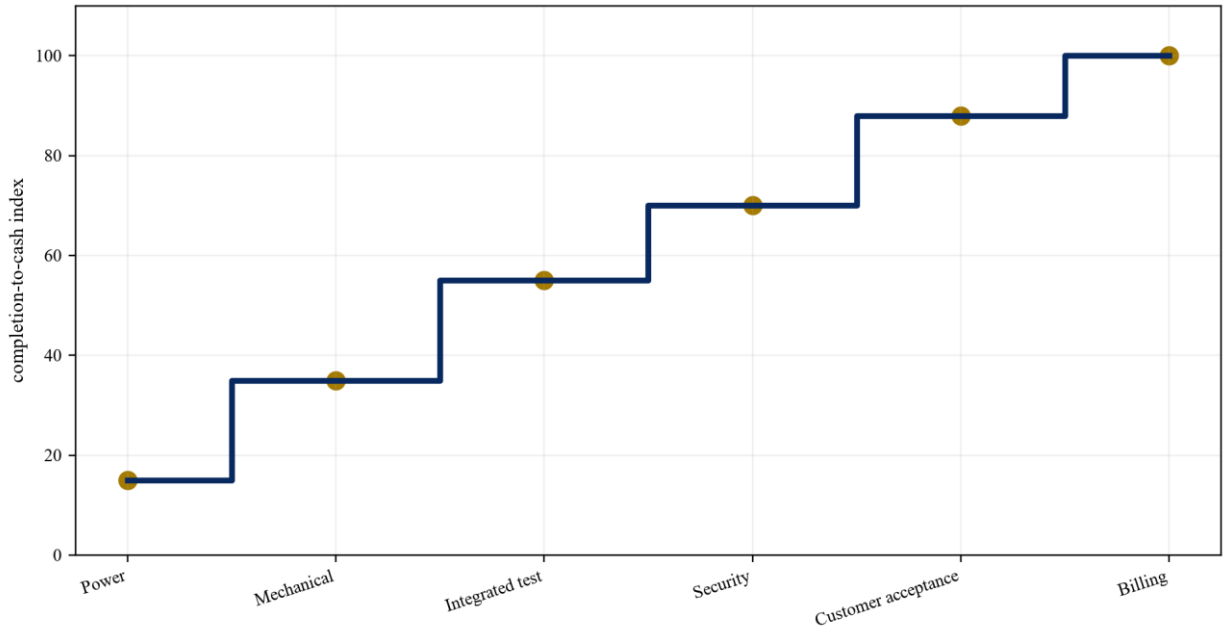
The decision question is which mechanical, power, integrated-system, security and customer tests release each 50 MW block. The evidence file should begin with contract definitions, test scripts, witness plan, results, defects and acceptance certificate. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [2][17]

The principal failure is that one campus completion certificate triggers debt treatment while material blocks remain unaccepted. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to use separate tests and consequences for every capacity block and site-wide dependency. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Figure 4. Block-level completion and billing sequence



Proposed control sequence; project contracts determine actual tests and cash release.

Table 5. Block-level completion hierarchy

Test	Evidence	Typical consequence
power available	authorised tested capacity	commissioning permitted
mechanical completion	installed systems and punch list	integrated testing
integrated systems	witnessed load and failover	serviceability established
security accreditation	access and control approval	customer systems permitted
customer acceptance	contractual sign-off	billing begins
financial completion	coverage, reserves and no default	debt conversion

Proposed hierarchy; project and customer documents control consequences.

18. Translate acceptance into revenue

The decision question is when delivered capacity creates deposits, rent, minimum revenue, usage revenue and service credits. The evidence file should begin with billing schedule, acceptance mechanics, price formula, ramp, credits, termination and collection evidence. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [16][17]

The principal failure is that megawatts described as contracted do not produce cash until conditions and ramp thresholds are met. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to model cash from enforceable billing events and reconcile it to acceptance evidence. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

19. Build the construction liquidity case

The decision question is how interest, fees, operations, commissioning, energy and delay costs are funded before stable revenue. The evidence file should begin with monthly draw model, reserves, equity commitments, customer cash and downside actions. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [11][18]

The principal failure is that a fully funded construction budget excludes operating burn and delay before tenant ramp. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to size interest and operating liquidity to a coherent delay and ramp scenario. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

20. Set contingency and overrun support

The decision question is how design maturity, procurement, utility scope, interfaces and schedule determine required protection. The evidence file should begin with risk register, cost plan, contracts, bids, changes, insurance and sponsor capacity. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [10][11]

The principal failure is that a percentage contingency is consumed by known scope gaps before genuine uncertainty occurs. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to separate known allowances from unallocated contingency and define automatic equity cures. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

21. Design covenants and stop-draw events

The decision question is which cost, power, customer, equipment, schedule and compliance failures require intervention. The evidence file should begin with facility terms, milestone register, reporting, model and cure mechanics. Each item should record its source, date, legal owner, responsible party, expiry

or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [11][14]

The principal failure is that financial covenants respond after technical and contractual value has deteriorated. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to use forward-looking evidence, liquidity, concentration and completion covenants. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

22. Apply the hypothetical phase-one case

The decision question is how USD 3.60 billion of uses and four customer blocks affect construction exposure. The evidence file should begin with the stated hypothetical cost, funding, reserve, contingency, capacity and timing assumptions. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [1][11]

The principal failure is that one aggregate model conceals which capacity blocks support debt and which remain conditional. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to show sources, uses, draws, acceptance, billing and debt capacity by block and month. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Table 6. Hypothetical phase-one financing case

Metric	Central assumption	Delay or range
phase-one capacity	200 MW	150-200 MW
total phase-one cost	USD 3.60bn	USD 3.60bn-4.05bn
construction debt	USD 1.60bn	capped at USD 1.60bn
sponsor equity	USD 1.40bn	USD 1.40bn plus cures
customer deposits and subordinated payments	USD 600m	USD 350m-600m
contingency	USD 320m	controlled release
interest and operating reserve	USD 260m	USD 260m plus equity

Metric	Central assumption	Delay or range
forward conversion DSCR	1.40x	1.20x-1.40x

Wholly hypothetical; figures do not describe an identified project or financing.

23. Map draws to verified capacity

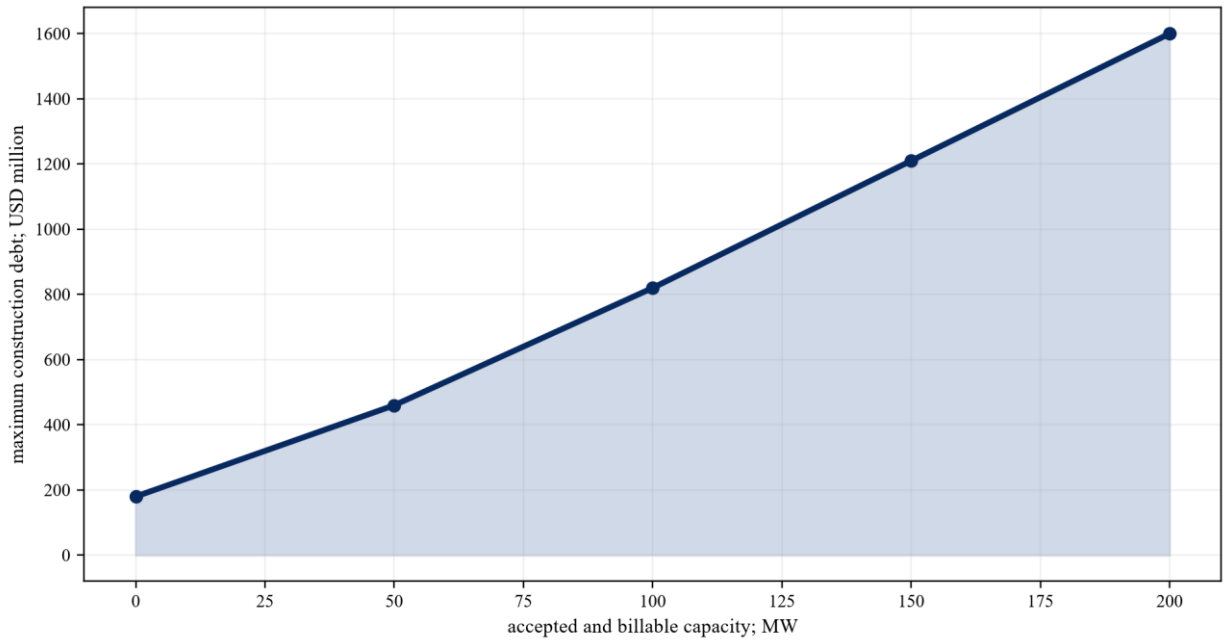
The decision question is how debt availability rises as power, buildings, systems and tenant evidence mature. The evidence file should begin with draw schedule, engineer certificates, capacity ledger, customer milestones and remaining funds. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [11][17]

The principal failure is that the facility approaches full draw before sufficient capacity is accepted and billable. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to cap cumulative debt at the lower of eligible cost, evidence-weighted availability and stressed takeout. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Figure 5. Hypothetical debt availability by accepted capacity



Wholly hypothetical; debt remains subject to all finance-document conditions.

24. Stress power and tenant ramp

The decision question is which combinations of power delay, construction overrun, slower acceptance and higher rates impair repayment. The evidence file should begin with power programme, contracts, cost forecast, liquidity and takeout terms. Each item should record its source, date, legal owner, responsible

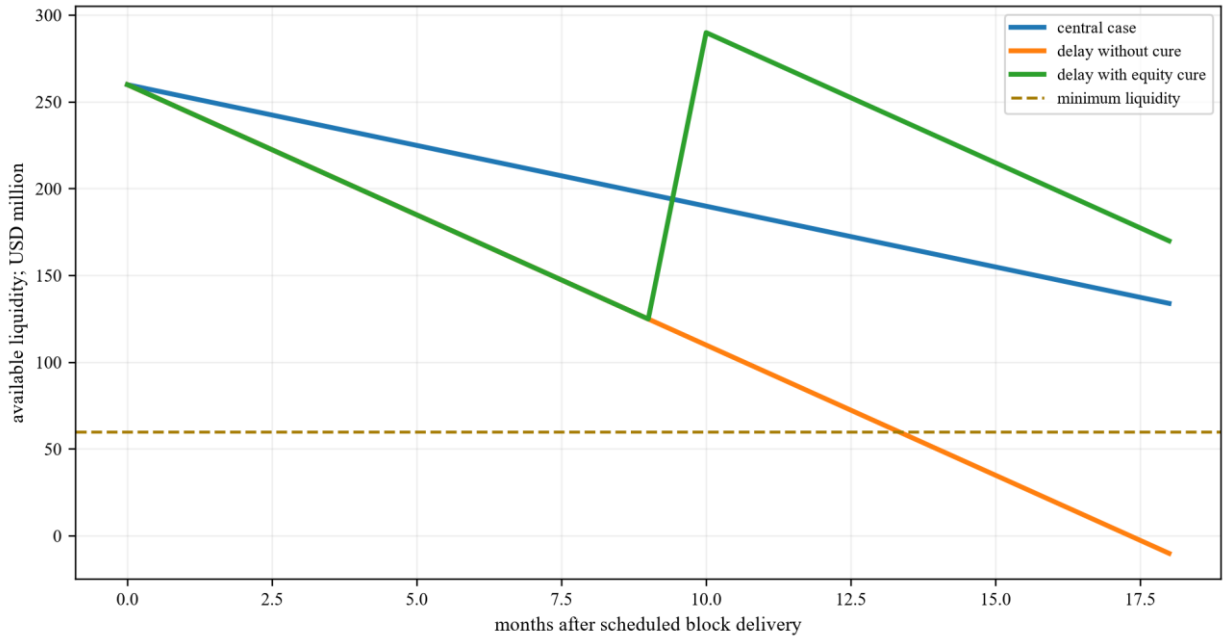
party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [1][18]

The principal failure is that single-variable sensitivities miss compounding delay, cost and revenue effects. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to run coherent six, twelve and eighteen-month cases with stated management actions. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Figure 6. Hypothetical delay-liquidity paths



Wholly hypothetical; USD million.

25. Test concentration and substitution

The decision question is whether the project can withstand delay, downsizing or loss of its anchor customer. The evidence file should begin with contract rights, replacement demand, technical specificity, refit cost, timing and market evidence. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [5][20]

The principal failure is that a long lease term is treated as diversification despite dependence on one technology and customer group. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to quantify concentration, re-letting cost and substitution time at block level. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

26. Define permanent-debt conversion

The decision question is which power, completion, customer, operating and coverage conditions permit takeout. The evidence file should begin with term sheet, acceptance certificates, operating record, valuation, reserves and covenant certificate. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [11][18]

The principal failure is that permanent financing is assumed before its conditions and availability period align with actual ramp. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to treat conversion as conditional and retain funded alternatives until every test is met. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

27. Plan downside recovery

The decision question is whether completion, customer cure, sale, re-letting, phase reduction or enforcement preserves value. The evidence file should begin with collateral, remaining cost, customer rights, marketability, consents, time and specialist advice. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [11][20]

The principal failure is that book cost and strategic relevance substitute for executable net recovery. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to compare recovery routes after remaining expenditure, delay, liabilities and transaction cost. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

28. Reach the financing decision

The decision question is whether phased evidence, funded liquidity, enforceable commitments and recovery justify the proposed debt. The evidence file should begin with phase map, commitment ladder, power case, balanced budget, downside model and security package. Each item should record its source, date, legal owner, responsible party, expiry or review date and relationship to the relevant capacity block. Market demand provides context. Executed project documents determine rights, obligations and cash. [1][2]

The principal failure is that the strategic importance of AI displaces project-specific repayment evidence. Project finance converts construction advances into funded exposure before the campus produces stable cash. The lender needs an observable chain from the current physical and contractual position to the next milestone, the funding required to reach it and the value preserved if progress stops.

The recommended response is to approve only the exposure supported by verified capacity, enforceable cash and funded downside actions. Management estimates may support scenarios when identified as assumptions and reconciled to external evidence. The central case should retain current rights, committed funding and costed obligations. The downside should combine related power, construction, equipment, customer and financing effects.

The credit record should state funded exposure, verified capacity, the next evidence gate, remaining cost, minimum liquidity, cure period and recovery route. It should identify the party able to act, required consent and the last date for value-preserving intervention.

Table 7. Financing-decision record

Decision	Evidence required	Possible action
commitment	phase perimeter and balanced funding	approve or resize
each draw	progress, power, tenant and liquidity evidence	fund, defer or stop
capacity acceptance	completed tests and customer sign-off	recognise billing
delay response	liquidity, cures and recovery	cure or restructure
conversion	accepted capacity, cash and coverage	refinance or extend
deterioration	quantified legal, technical and cash effect	protect, sell or enforce

Proposed governance; transaction-specific approvals remain necessary.

Frequently asked questions

Q: Can construction debt be sized against a hyperscaler letter of intent? A: A letter of intent can support market evidence but may not create enforceable payment. Debt sizing should reflect the document's binding provisions, conditions, expiry, price, capacity, termination rights, obligor and credit support.

Q: How should lenders treat customer deposits? A: The lender should review refund rights, performance conditions, set-off, priority, permitted use, security and the consequences of delay or termination. A deposit can be a restricted funding source and a liability rather than permanent equity.

Q: Should compute equipment sit inside the project company? A: The answer depends on ownership, useful life, refresh obligations, export controls, customer specificity and repayment source. Long-lived infrastructure debt should not rely on short-lived equipment residual value without contractual protection.

Q: What proves that a capacity block is complete? A: Evidence may include authorised power, mechanical completion, integrated-system testing, failover, cooling performance, security accreditation, customer

acceptance and the start of enforceable billing. The finance documents should define the required combination.

Q: How should shared campus infrastructure be allocated? A: A documented method should allocate cost and capacity by beneficiary, use or reserved expansion. The first financed phase should not absorb optional later-phase expenditure without reimbursement, priority rights or committed funding.

Q: What should stop further debt draws? A: Examples include an unbalanced budget, material power delay, customer downsizing, failed equipment delivery, loss of a required approval, insufficient remaining funds, a reserve breach or failure of a block-level milestone.

Q: How should tenant ramp be stressed? A: The model should combine delayed power, later acceptance, reduced blocks, service credits, higher operating cost and increased interest. It should show reserve use, equity cures, takeout conditions and the point at which further construction destroys recovery value.

Q: What is the central recovery question? A: The lender should determine which party can complete, acquire, re-let or operate each powered block, which approvals and modifications are required and the net proceeds after remaining cost, delay, liabilities and transaction expenses.

References

[1] International Energy Agency, *Energy and AI*. https://www.iea.org/reports/energy-and-ai

[2] OpenAI, *Introducing Stargate UAE*. https://openai.com/index/introducing-stargate-uae/

[3] Embassy of the United Arab Emirates in Washington, DC, *UAE-US AI Partnership*. https://www.uae-embassy.org/news/uae-us-ai-acceleration-partnership

[4] International Energy Agency, *Energy Demand from AI*. https://www.iea.org/reports/energy-and-ai/energy-demand-from-ai

[5] U.S. Securities and Exchange Commission, *Microsoft 2025 Form 10-K*. https://www.sec.gov/Archives/edgar/data/789019/000095017025100235/msft-20250630.htm

[6] U.S. Securities and Exchange Commission, *Amazon 2025 Form 10-K*. https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm

[7] U.S. Securities and Exchange Commission, *Alphabet 2025 Form 10-K*. https://www.sec.gov/Archives/edgar/data/1652044/000165204426000018/goog-20251231.htm

[8] U.S. Securities and Exchange Commission, *Meta Platforms 2025 Form 10-K*. https://www.sec.gov/Archives/edgar/data/1326801/000132680126000017/meta-20251231.htm

[9] ASHRAE, *Thermal Guidelines for Data Processing Environments*. https://www.ashrae.org/technical-resources/bookstore/datacom-series

[10] Infrastructure and Projects Authority, *Project Routemap*. https://www.gov.uk/government/publications/improving-infrastructure-delivery-project-initiation-routemap

[11] Office of the Comptroller of the Currency, *Project Finance*. https://www.occ.gov/publications-and-resources/publications/comptrollers-handbook/files/project-finance/pub-ch-project-finance.pdf

[12] World Bank Group, *Public-Private Partnership Reference Guide*. https://ppp.worldbank.org/public-private-partnership/library/ppp-reference-guide-3-0

[13] European Banking Authority, *Guidelines on Loan Origination and Monitoring*. https://www.eba.europa.eu/regulation-and-policy/credit-risk/guidelines-loan-origination-and-monitoring

[14] Basel Committee on Banking Supervision, *Principles for the Management of Credit Risk*. https://www.bis.org/publ/bcbs75.htm

[15] U.S. Department of Commerce, Bureau of Industry and Security, *Export Administration Regulations*. https://www.bis.gov/regulations/ear

[16] IFRS Foundation, *IFRS 15 Revenue from Contracts with Customers*. https://www.ifrs.org/issued-standards/list-of-standards/ifrs-15-revenue-from-contracts-with-customers/

[17] IFRS Foundation, *IFRS 16 Leases*. https://www.ifrs.org/issued-standards/list-of-standards/ifrs-16-leases/

[18] IFRS Foundation, *IFRS 9 Financial Instruments*. https://www.ifrs.org/issued-standards/list-of-standards/ifrs-9-financial-instruments/

[19] IFRS Foundation, *IAS 37 Provisions, Contingent Liabilities and Contingent Assets*. https://www.ifrs.org/issued-standards/list-of-standards/ias-37-provisions-contingent-liabilities-and-contingent-assets/

[20] IFRS Foundation, *IFRS 13 Fair Value Measurement*. https://www.ifrs.org/issued-standards/list-of-standards/ifrs-13-fair-value-measurement/

[21] United Arab Emirates, *Federal Decree-Law No. 45 of 2021 Regarding the Protection of Personal Data*. https://u.ae/en/about-the-uae/digital-uae/data/data-protection-laws

[22] Abu Dhabi Global Market, *Data Protection Regulations 2021*. https://www.adgm.com/operating-in-adgm/office-of-data-protection/legislation

[23] Equator Principles Association, *The Equator Principles EP4*. https://equator-principles.com/app/uploads/The-Equator-Principles_EP4_July2020.pdf

[24] International Energy Agency, *AI and Energy Security*. https://www.iea.org/reports/energy-and-ai/ai-and-energy-security

[25] U.S. Securities and Exchange Commission, *Cipher Mining 2025 Form 10-K*. https://www.sec.gov/Archives/edgar/data/1819989/000181998926000009/cifr-20251231.htm

[26] National Institute of Standards and Technology, *AI Risk Management Framework*. https://www.nist.gov/itl/ai-risk-management-framework

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