

Stargate I Feasibility

Executive Summary

Stargate I should be treated as the strongest public Stargate proof point, but not yet as a fully de-risked 1.2 GW AI campus.



1. Verdict

Stargate I Abilene is real, partially operating, and more credible than most announced AI-campus megaprojects — but the public record still supports only a 5.2 / 10 feasibility score for the existing ~1.2 GW campus.

The decisive question is not whether Crusoe, Oracle, OpenAI, and Lancium have a functioning campus in Taylor County. Public disclosures and third-party trackers indicate that a meaningful first tranche is live. The question is whether the remaining roughly 900 MW can be made firm, permitted, powered, cooled, financed, and fully utilized on the compressed buildout narrative.

Overall score: 5.2 / 10

Stage tag: Under Construction — partially operating, with the remaining campus still being built and energized.

Last reviewed: May 29, 2026.

Evidence as of: May 29, 2026.

One-sentence posture: Stargate I is a credible partial-buildout success case, not yet a proven 1.2 GW delivery case.

Scoring arithmetic: Claim mean 5.2 · controlling claim (firm power deliverability and cost allocation) 5.5 → cap 7.0 · published overall 5.2.

2. Single biggest risk

The single biggest risk is **firm power deliverability for the full ~1.2 GW campus, including cost allocation, on-site generation proof, ERCOT/AEP large-load treatment, and equipment delivery.**

That risk controls the entire feasibility read. If the remaining load cannot be reliably energized, then the mid-2026 completion claim weakens, the \$15B economic case becomes highly exposed, the water and air-permit debate intensifies, and the OpenAI/Oracle demand case matters less because the campus cannot deliver the compute capacity being sold.

What would clear the risk: public evidence of executed turbine and EPC commitments sized to the 1+ GW on-site generation claim; TCEQ authorizations covering the actual turbine fleet and emissions profile; firm gas-supply arrangements; ERCOT/AEP approvals or completed studies for full-campus operation; SB6 / PUCT large-load compliance evidence; transformer, breaker, and switchgear delivery dates; and building-by-building energization milestones.

3. Where the story diverges

What the operator story says

The public Stargate narrative presents Abilene as the flagship proof point for the OpenAI / Oracle / SoftBank / MGX Stargate platform: an eight-building, roughly 1.2 GW AI-compute campus developed by Crusoe on Lancium's Clean Campus in Taylor County, operated by Oracle for OpenAI workloads, with Nvidia GB200 Blackwell racks and direct-to-chip liquid cooling. The May 2026 project specification describes two buildings live since September 2025, roughly 0.3 GW operating per Epoch AI by April 2026, six additional buildings targeted around mid-2026, and roughly \$15B of site-level investment.

What is actually proven publicly

The public record supports a real, high-velocity, partially operating project. It does **not** yet prove the full 1.2 GW claim at a substantiated 7+ score. The record contains encouraging evidence – partial operation, a large host site, TCEQ records for Longhorn Data Center electric-generating units, a 345 kV regional transmission context, and a serious sponsor/operator stack – but the decisive proof remains missing: executed full-scale power arrangements, full-load SB6/ERCOT treatment, a quantified water balance, full permitting closeout, and bankable offtake terms.

The March 2026 abandonment of a separate 600 MW Abilene expansion is not fatal to the existing campus. But it is not irrelevant. Data Center Dynamics, Bloomberg, and Enverus reporting, as summarized in the project record, tie the abandoned add-on to financing and demand-forecasting disagreements. That makes it a contained negative read-through: it should not be treated as proof that the existing 1.2 GW campus is impaired, but it does warn against scoring the remaining buildout as already de-risked.

4. Claim scorecard

Confidence legend: Score measures feasibility; confidence measures maturity of public evidence. A low score with high confidence means the public record strongly supports a negative feasibility read. A mid score with lower confidence means the claim is plausible but not proven.

#	CLAIM	SCORE	CONFIDENCE	ONE-LINE READ
1	Power delivery for existing ~1.2 GW	5.5	Meaningful but qualified	Partial operation and on-site-generation permitting activity supporting plausibility; full firm deliverability remains unproven. Controlling claim.
2	Mid-2026 completion / energization	5.5	Preliminary to meaningful	Physical progress is real, but six remaining buildings plus power, inspections, commissioning, and heavy equipment are not publicly closed out.
3	Water sustainability	4.5	Preliminary	Closed-loop liquid cooling is favorable, but no public full-campus water balance or municipal-impact proof is available.
4	ERCOT West grid coexistence	4.5	Preliminary	ERCOT West can host large loads, but Stargate's simultaneous-service proof amid corridor GW-scale demand is not public.

#	CLAIM	SCORE	CONFIDENCE	ONE-LINE READ
5	600 MW expansion abandonment is contained	6.0	Meaningful but qualified	The abandoned add-on appears distinct from the retained campus, but it is a real warning on demand and financing discipline.
6	Economic viability at ~\$15B scope	5.5	Meaningful but qualified	Illustrative economics are barely positive in the base case and highly sensitive to schedule, power, and utilization.
7	OpenAI demand durability	5.0	Preliminary	Demand is real, but public evidence does not show tenor, take-or-pay, minimum utilization, termination rights, or credit support.
8	Community and political durability	5.0	Meaningful but qualified	Existing operations lower shut-down risk, while water, gas generation, abatements, labor, housing, and jobs claims remain contested.

5. Claim-by-claim assessment

Claim 1 – Power Delivery: The existing campus can reliably deliver ~1.2 GW via on-site gas generation and ERCOT grid power

Falsifiable proposition: Stargate I can reliably operate a roughly 1.2 GW flat 24/7 data-center load using a mix of on-site gas generation, ERCOT grid power, and associated high-voltage infrastructure.

Supporting evidence. The strongest support is operating reality: roughly 0.3 GW is described as live by Epoch AI as of April 2026 in the project specification. The Abilene area has meaningful high-voltage context; current power mapping identified numerous transmission assets within the regional screen, including 345 kV infrastructure and AEP Texas North presence. TCEQ records identify Longhorn Data Center electric-generating units in Abilene, Taylor County, under Standard Permit Registration 177263, confirming that on-site generation is not merely a press-release concept.

Contradicting or limiting evidence. None of that proves the remaining ~900 MW. ERCOT's April 2026 Large Load Update says ERCOT was tracking approximately **410 GW** of large loads seeking interconnection, roughly **87%** tied to data centers, and that after 2026 only large loads with executed interconnection agreements satisfying PUCT Project 58481 requirements would be included in the forecast. That is a harsh reference environment for any 1.2 GW claim. DOE's July 2024 Large Power Transformer Resilience Report says 36-month transformer lead times are commonly quoted and maximum lead times can reach 60 months; CISA/NIAC's 2024 transformer shortage work similarly describes average transformer lead times around 120 weeks and large-transformer ranges of 80–210 weeks. Public evidence reviewed for this report did not show full-scale turbine procurement, gas supply, transformer delivery, completed ERCOT/AEP studies, or SB6 compliance for the full campus.

Confidence: Meaningful but qualified.

Score: 5.5 / 10.

Assessment closer: This is plausible and materially advanced, but not substantiated. It should remain in the 5–6 band until full-load power evidence is public.

Claim 2 – The remaining six buildings are completed and energized on the mid-2026 target

Falsifiable proposition: Buildings 3–8 are completed, inspected, commissioned, and energized around the stated mid-2026 target, bringing the campus to roughly 1.2 GW.

Supporting evidence. Two live buildings and a functioning first tranche materially reduce greenfield schedule risk. Site screening around Abilene indicates flat terrain and favorable soils: USDA Soil Data Access returned a Sagerton–Urban land complex with 0–3% slopes and well-

drained dominant soils, while USGS 3DEP screening showed low slope at the Abilene reference point. The site platform is large enough for a campus-scale build, and the City/Taylor County/Lancium economic-development history supports the existence of a large clean-compute land platform.

Contradicting or limiting evidence. A building shell is not an energized AI data hall. The remaining schedule depends on turbines, transformers, switchgear, gas infrastructure, cooling systems, GB200 rack delivery, commissioning, electrical inspections, fire-life-safety signoff, and certificates of occupancy. TxDMV oversize/overweight rules provide a route-permit pathway for heavy equipment, but public records reviewed here did not show final-mile route approvals, bridge checks, crane/rigging plans, or building-by-building closeout status. Regulatory review also found no public matrix of City of Abilene permits and certificates for buildings 3–8.

Confidence: Preliminary to meaningful.

Score: 5.5 / 10.

Assessment closer: Physical progress is real, but the mid-2026 full-campus completion claim remains aggressive on the public record.

Claim 3 – Cooling water is adequate without material municipal-supply impact

Falsifiable proposition: A roughly 1.2 GW liquid-cooled, closed-loop AI campus can operate in semi-arid Taylor County without materially burdening municipal water supply.

Supporting evidence. Closed-loop, direct-to-chip liquid cooling is materially better than evaporative cooling from a water-use standpoint. A federally hosted Oracle fact sheet says the campus uses closed-loop, non-evaporative liquid cooling, and City of Abilene public materials describe long-term water-supply planning, Lake O.H. Ivie water, conservation, and reclaimed-water use for large irrigation customers. These facts support a plausible water-light operating strategy.

Contradicting or limiting evidence. Closed-loop is not zero-water. Initial fills, make-up water, humidification, treatment, cleaning, construction water, fire systems, and any on-site generation support water needs can still matter. The public record reviewed here did not show a full-campus water balance, source agreement, reclaimed-water contract, utility-capacity letter, drought-stage operating plan, wastewater route, TPDES/TLAP permit, pretreatment approval, or zero-liquid-discharge basis. US Drought Monitor screening for Taylor County showed worsening DO/D1 conditions even though D2+ coverage was not present at the time of review. FEMA and USFWS screens around the Abilene reference point also identified floodplain and wetlands overlays nearby; because the exact parcel boundary was not confirmed, those are screening-level cautions rather than parcel findings.

Confidence: Preliminary.

Score: 4.5 / 10.

Assessment closer: Water is the weakest non-power claim. The cooling design is favorable, but the no-material-municipal-impact claim is not yet proven.

Claim 4 – Stargate I can coexist with adjacent and corridor GW-scale loads in ERCOT West under SB6

Falsifiable proposition: Stargate I's ~1.2 GW load can operate alongside Lancium, Vantage Frontier in nearby Shackelford County, and other ERCOT West large-load demand without destabilizing regional reliability or failing SB6/PUCT requirements.

Supporting evidence. The region has high-voltage infrastructure and a long history of large energy projects. Texas is structurally more comfortable with large energy loads and private generation than many U.S. markets. ERCOT has a formal large-load process, and SB6 creates a framework rather than a ban.

Contradicting or limiting evidence. The April 2026 ERCOT large-load figure – ~410 GW seeking interconnection, ~87% data centers – makes queue inflation and readiness screening central to the score. Texas SB6 applies to large loads in the ERCOT power region and establishes a 75 MW demand threshold, far below Stargate's claimed campus scale. Public evidence reviewed here did not show Stargate's full-load queue position, executed interconnection agreement, upgrade-cost allocation, curtailment terms, simultaneous-service studies, or SB6 compliance package. Adjacent GW-scale projects make the coexistence claim harder, not easier.

Confidence: Preliminary.

Score: 4.5 / 10.

Assessment closer: Regional power context is favorable for plausibility, but full coexistence under ERCOT West constraints remains unproven.

Claim 5 – The abandoned 600 MW expansion is contained and does not impair the existing ~1.2 GW campus

Falsifiable proposition: The abandoned 600 MW Abilene add-on was a separate expansion lease or capacity increment, not evidence that the retained ~1.2 GW flagship is failing.

Supporting evidence. The project specification clearly scopes this assessment to the existing ~1.2 GW campus and distinguishes that campus from the abandoned 600 MW add-on. Reporting summarized in the project record indicates the existing campus continues to build out and that Meta has reportedly been in talks, with Nvidia involvement, to absorb freed Crusoe capacity. Partial operation further supports the distinction: a live campus is not equivalent to a cancelled paper expansion.

Contradicting or limiting evidence. The abandoned expansion was large – roughly half the retained campus scale. Bloomberg, Data Center Dynamics, and Enverus reporting, as summarized in the project record, tied the collapse to financing challenges and OpenAI's

changing demand forecasts. Enverus framed the pullback as evidence that speculative large-load interconnection queues are beginning to fall away. Those facts do not kill the retained campus, but they directly challenge any assumption that every announced Stargate megawatt will convert into durable load.

Confidence: Meaningful but qualified.

Score: 6.0 / 10.

Assessment closer: The expansion abandonment is contained, but adverse. It supports a haircut, not a failure call.

Claim 6 – The existing ~\$15B scope remains economically viable after the expansion cap

Falsifiable proposition: The retained ~1.2 GW campus can justify roughly \$15B of capital investment after the abandoned 600 MW expansion and reported financing/demand-forecast disagreements.

Supporting evidence. The campus has serious sponsors, partial operations, and a compute market that remains structurally capacity-constrained. At the announced ~\$15B / 1.2 GW scale, implied capex is roughly \$12.5M per MW, a plausible figure for AI-specialized, liquid-cooled, power-dense capacity. Illustrative public-record modeling using an 8.0% nominal discount rate and a full-utilization operating case produced a modestly positive base-case NPV of roughly **+\$0.31B** with an **8.35%** IRR.

Contradicting or limiting evidence. That base case is thin. A one-year schedule slip moved the illustrative NPV negative by more than \$1B, and a downside case combining capex overrun, delayed ramp, and lower utilization produced a materially negative NPV. Texas data-center sales-tax incentives may be material: the Texas Comptroller describes qualifying data-center exemptions from the 6.25% state sales and use tax, and a qualifying large data-center project exemption can last 20 years. Incentive value is meaningful relative to a thin base-case NPV, which means the public-record economic case is execution- and incentive-sensitive.

Confidence: Meaningful but qualified.

Score: 5.5 / 10.

Assessment closer: The current scope is economically plausible, not bankable on public evidence.

Claim 7 – OpenAI's demand for the existing 1.2 GW is durable

Falsifiable proposition: OpenAI-linked demand, delivered through Oracle-operated capacity, is durable enough to support the full 1.2 GW buildout.

Supporting evidence. OpenAI's compute demand is real, and the campus is reportedly running Nvidia GB200 Blackwell systems for training and inference. Oracle's role as operator gives the project a major enterprise infrastructure counterparty rather than an unsupported

startup-load profile. Partial operation supports the view that the relationship has moved beyond intent.

Contradicting or limiting evidence. The public record does not disclose the offtake contract terms that would make the demand claim bankable: tenor, take-or-pay commitments, minimum utilization, price, power-cost pass-through, termination rights, parent guarantees, collateral, or remedies. The abandoned 600 MW expansion directly implicates OpenAI demand forecasting and financing discipline. Enverus's queue-inflation interpretation is particularly relevant here: in a market full of speculative large-load positions, durable demand must be proven contractually, not inferred from brand strength.

Confidence: Preliminary.

Score: 5.0 / 10.

Assessment closer: Demand is credible, but the public record does not prove durable full-campus offtake.

Claim 8 – The site can sustain long-term operations without material risk from community and political opposition

Falsifiable proposition: Stargate I can operate long-term without Save Abilene opposition, water concerns, gas-generation health concerns, tax abatements, labor issues, housing pressure, or jobs-benefit skepticism materially affecting operations, renewals, modifications, or future local support.

Supporting evidence. Existing operations lower the likelihood of outright reversal. The local and state political environment appears generally pro-growth and pro-energy development. Official records identify standard local permitting pathways, and TCEQ records show an actual air-permitting track rather than an unpermitted concept. The federally hosted Oracle fact sheet describes more than 6,400 construction workers on site daily and broad onsite job claims.

Contradicting or limiting evidence. The local bargain is not fully proven. Save Abilene concerns map directly onto the national data-center opposition pattern: water security, on-site generation health impacts, tax incentives, construction disruption, housing pressure, and skepticism over permanent jobs. Bloomberg's reported ~57 permanent-jobs figure, cited in the project specification, remains difficult to reconcile with broader onsite-jobs messaging; those may be different scopes, but that distinction itself needs public clarification. TCEQ air-permit and Title V applicability issues create a durable venue for emissions and health objections.

Confidence: Meaningful but qualified.

Score: 5.0 / 10.

Assessment closer: Existing operations are likely durable; modifications, renewals, abatements, and expansion headroom remain politically exposed.

6. Cross-cutting risk factors

Power schedule versus data-center schedule. The strongest cross-cutting issue is the mismatch between data-hall construction timelines and power-infrastructure timelines. Reference-class power analysis for comparable data centers shows that data-center buildings can be delivered in 18–24 months, while gas generation, transformers, and transmission upgrades can run much longer. Stargate's partial operation proves the first tranche; it does not prove the remaining tranche.

Behind-the-meter gas is both solution and risk. On-site gas can improve firming, resilience, and ERCOT deliverability. It also introduces turbine procurement, gas-supply, emissions, TCEQ, community-health, and Title V questions. Parker Hannifin's reported turbine involvement is relevant, but a supplier reference is not the same as public proof of installed, permitted, synchronized, and fueled 1+ GW generation.

ERCOT queue inflation changes the burden of proof. ERCOT's April 2026 large-load update is central context. In a 410 GW large-load environment, feasibility credit should attach to executed readiness evidence, not queue volume or sponsor ambition.

Water and air risks reinforce each other politically. Closed-loop cooling lowers water use, but water scarcity remains legible to residents. On-site gas lowers grid-dependence, but raises air and health concerns. Together they create a coherent opposition narrative even if each issue is technically manageable.

Demand durability and power deliverability are linked. If OpenAI/Oracle demand is durable, the project can absorb high power costs and infrastructure burdens. If demand softens, the fixed-cost burden of a \$15B campus becomes unforgiving. The abandoned 600 MW expansion is therefore a financial signal and a power-queue signal.

Jobs and incentives need scope discipline. The 57-permanent-jobs figure cited in the project specification, the federally hosted Oracle fact sheet's broad onsite-jobs language, and local tax-abatement materials appear to describe different scopes or time periods. Until reconciled, community-benefit claims should be treated carefully.

7. Reference-class comparison

Comparable gigawatt-scale data-center cases point to the same conclusion: **partial operations matter, but full-campus feasibility is earned through utility, generation, transmission, water, and offtake documents.**

Meta Richland Parish is the closest power-scale comparison. The Louisiana Public Service Commission record for Meta Richland Parish, including the Mount Olive to Sarepta 500 kV

transmission facilities and customer-load testimony, shows a phased load ramp tied to major generation and transmission infrastructure. That precedent supports Stargate's general strategy — hyperscale campuses can justify dedicated power infrastructure — but it also raises the proof bar. Multi-GW loads become substantiated when the public record shows the generation stack, transmission upgrades, cost recovery, and customer-protection terms.

Microsoft Quincy / Grant County PUD provides the queue-discipline lesson. Washington data-center workgroup materials describe uncertainty about how much electricity data centers will actually use and note that commercial-readiness standards can materially reduce queue requests; Grant County PUD's policy changes were cited as reducing data-center service requests from 3,000 MW to 2,300 MW. That is directly relevant to Stargate because Enverus framed the abandoned Abilene expansion as evidence that speculative large-load capacity is beginning to fall away.

Northern Virginia data centers provide the community and grid-planning lesson. Northern Virginia's data-center growth has forced more explicit planning around transmission, ratepayer impact, siting, and community opposition. The lesson for Abilene is not that data centers cannot be built; it is that the second-order burdens — power infrastructure, water, land use, tax benefits, and public trust — become the feasibility issue as campuses scale.

xAI Colossus / TVA-style load-planning precedent adds a demand-scenario warning. Large AI loads can be operationally real and still create major uncertainty for power-system planning because utilization, load shape, backup generation, emissions, and expansion scenarios vary materially. Stargate I should be scored on documented retained-campus commitments, not the broader \$500B Stargate narrative.

8. Overall feasibility score

The eight claim scores are: **5.5, 5.5, 4.5, 4.5, 6.0, 5.5, 5.0, 5.0**. The unweighted mean is **5.1875**, rounded to **5.2**. The controlling claim is Claim 1, firm power deliverability and cost allocation, at **5.5**; applying the +1.5 cap produces **7.0**, so the cap does not bind. Published overall score: **5.2 / 10**.

This score is intentionally lower than a narrative read of the project might suggest. Stargate I is not a paper campus. It is also not yet a proven 1.2 GW campus. The score sits in the Feasibility Index's **plausible but unproven** band because structural support exists — land, sponsors, partial operation, TCEQ activity, high-voltage context — while the decisive proof remains non-public.

9. Key data gaps and re-review triggers

The score should be re-reviewed if any of the following become public:

1. **Full-campus power package:** executed turbine supply and EPC documents, firm gas supply, transformer and switchgear delivery schedules, interconnection approvals, full-load energization plan, and SB6/PUCT compliance package.
2. **ERCOT/AEP large-load evidence:** queue position, completed studies, upgrade-cost allocation, curtailment terms, and simultaneous-service analysis with nearby GW-scale loads.
3. **TCEQ air-permit file:** final authorization, emissions limits, operating-hour limits, turbine configuration, Title V applicability, and any amendments or contested-case status.
4. **Water package:** full-campus water balance, source agreement, municipal-impact analysis, drought-stage operating plan, reclaimed-water commitments, and (source on file) or no-discharge evidence.
5. **Building closeout:** building-by-building permit status, fire/electrical inspections, certificates of occupancy or temporary certificates, and commissioning milestones for buildings 3–8.
6. **Offtake and finance evidence:** OpenAI/Oracle contract tenor, take-or-pay or minimum-utilization terms, credit support, termination rights, power-cost pass-through, and final financing structure for the retained 1.2 GW scope.
7. **Community-benefit reconciliation:** direct permanent jobs, onsite jobs, construction-worker local share, housing plan, taxes paid versus abated, emergency-service burdens, and water/air commitments.
8. **Expansion read-through:** any renewed Meta, Nvidia, Oracle, OpenAI, or Crusoe agreement for the abandoned 600 MW capacity, because it would clarify whether the March 2026 pullback was project-specific or market-wide.

10. Recommendation

Stargate I should be treated as the strongest public Stargate proof point, but not yet as a fully de-risked 1.2 GW AI campus. The appropriate posture is **proceed-with-gates:** credit the operating tranche and construction momentum, but hold the overall score in the low-5 range until firm power, water, regulatory, and offtake evidence catches up with the public narrative.

For industry observers, the key lesson is that the AI-campus feasibility bar has moved. A famous tenant, a \$15B headline, and live first buildings are no longer enough to substantiate a

gigawatt-scale claim. In 2026, the differentiator is documented readiness: interconnection, turbines, transformers, water, permits, contracts, and community bargain.

Score should remain 5.2 until specific, named evidence is public: ERCOT/AEP full-load approval and SB6 compliance for Stargate I; TCEQ final air authorization for the actual on-site generation fleet; a full-campus water balance and supply/wastewater commitments; building-by-building closeout for buildings 3–8; and OpenAI/Oracle offtake terms sufficient to prove durable use of the retained ~1.2 GW campus.

Standing feasibility disclaimer: This is a feasibility-grade public-record assessment as of the stated review date. It is not investment, legal, engineering, tax, or environmental advice and does not replace executed agreements, interconnection studies, permit files, counsel review, or engineering due diligence.