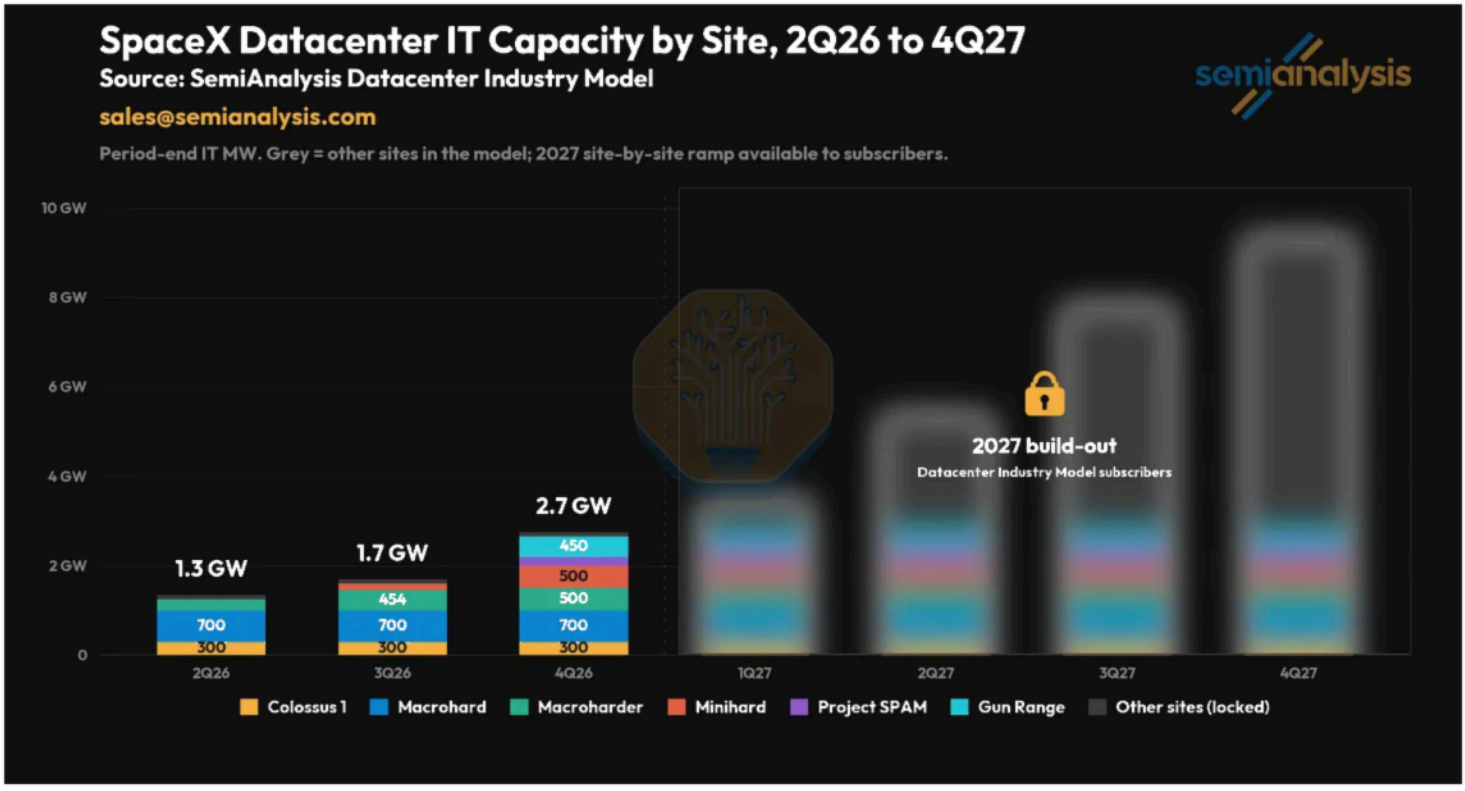
Elon Is Doing It Again: SpaceX Will Be The World's Biggest AI Cloud

Making 13GW in 1.5 Years A Reality, Repurposing Rocket Ship Campuses, A Datacenter at TeraFab?

3 HOURS AGO · PAID

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We wrote at length about how SpaceX's plans for 10GW in 2027 was feasible, paving the way for 300b+ ARR. We received a lot of pushback from folks calling it impossible. Now, just two months later, we're already seeing 3.6GW under construction across multiple sites, both existing and **new**. SpaceX has even revised its estimate up to ~13GW in 2027. **This would be the largest amount of datacenter capacity ever built by any one company in that timeframe, roughly equivalent to all of Google's datacenter capacity from 1999-2026 in just 1.5 years. We think it's possible and have already identified >9GW of capacity.**



Source:

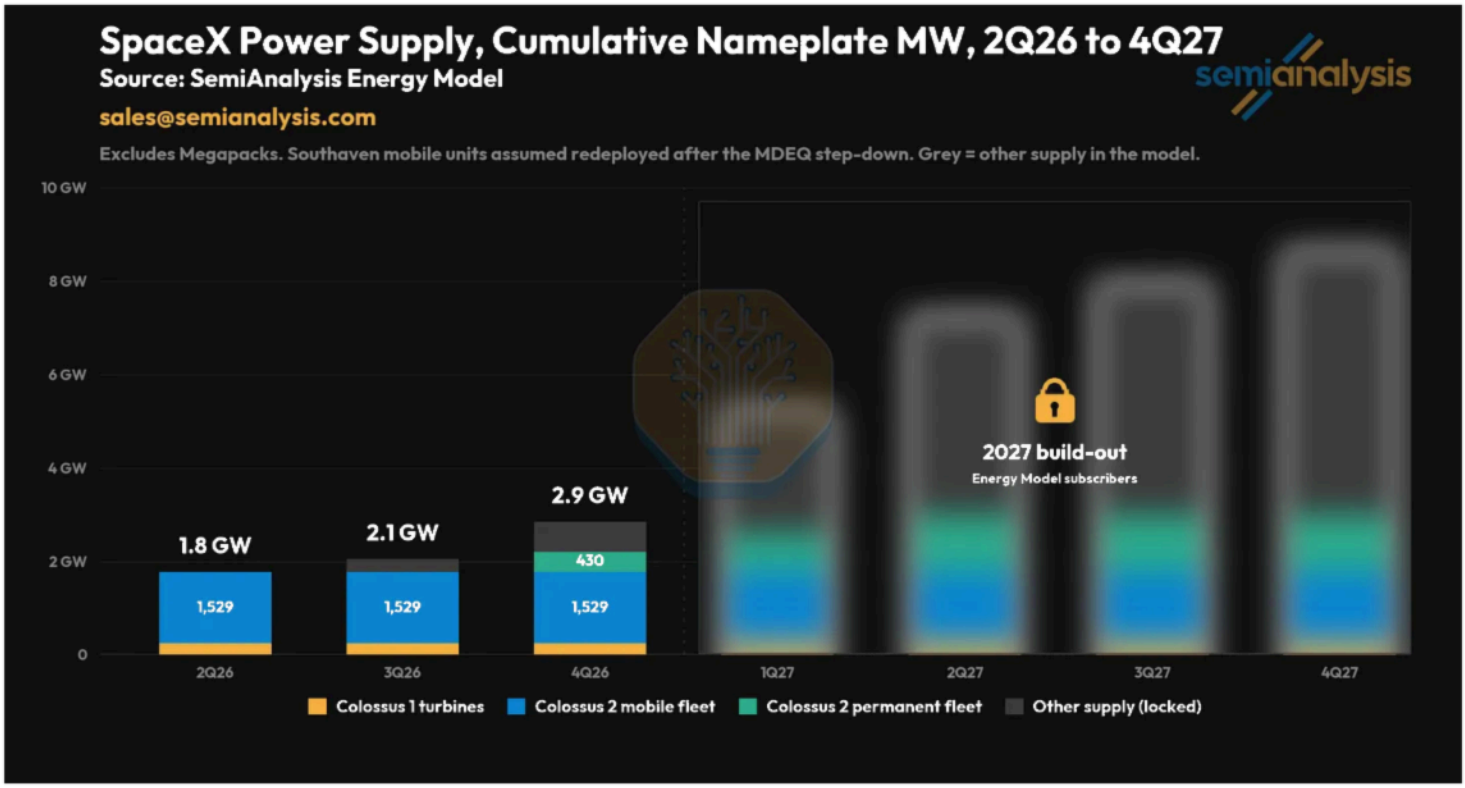
We've since written multiple update notes to our Datacenter Industry Model subscribers showing off all the sites that can make this possible. We now believe that SpaceX may be the fastest datacenter builder in the world, even more so than Chinese

peers. Watch how Colossus 2 adds nearly two Stargate Abilenes (2GW) in just under one year!


Colossus 2: From 0.4GW IT in January to 2.4GW by YE2026
MACROHARD
January 13, 2026
Jan
Apr
Jun
Aug
Oct
Source: SemiAnalysis Datacenter Industry Model

Source:

These sites now build so fast that the power supply is often identified mid-flight. Looking at our Energy Model, we see that power under Elon's management (>8GW) is less than our total datacenter power coming online (>9GW).



Source:

Datacenter Industry Model subscribers knew all of this before anyone else. On June 23, we sent our customers information on the infamous Elon "10GW in 2027" statement on SpaceX's first earnings call by six weeks, pointing out a 5-10GW incremental order for 2027 was floating around the supply chain and that a new building was already under construction at Colossus 2, now publicly known as "MiniHard." On September 14, before a single datahall went vertical, we identified >2GW of fresh sites, both at Colossus 2 and SpaceX's Starbase campus.



Starbase, Texas, October 29th, 2026; Source:

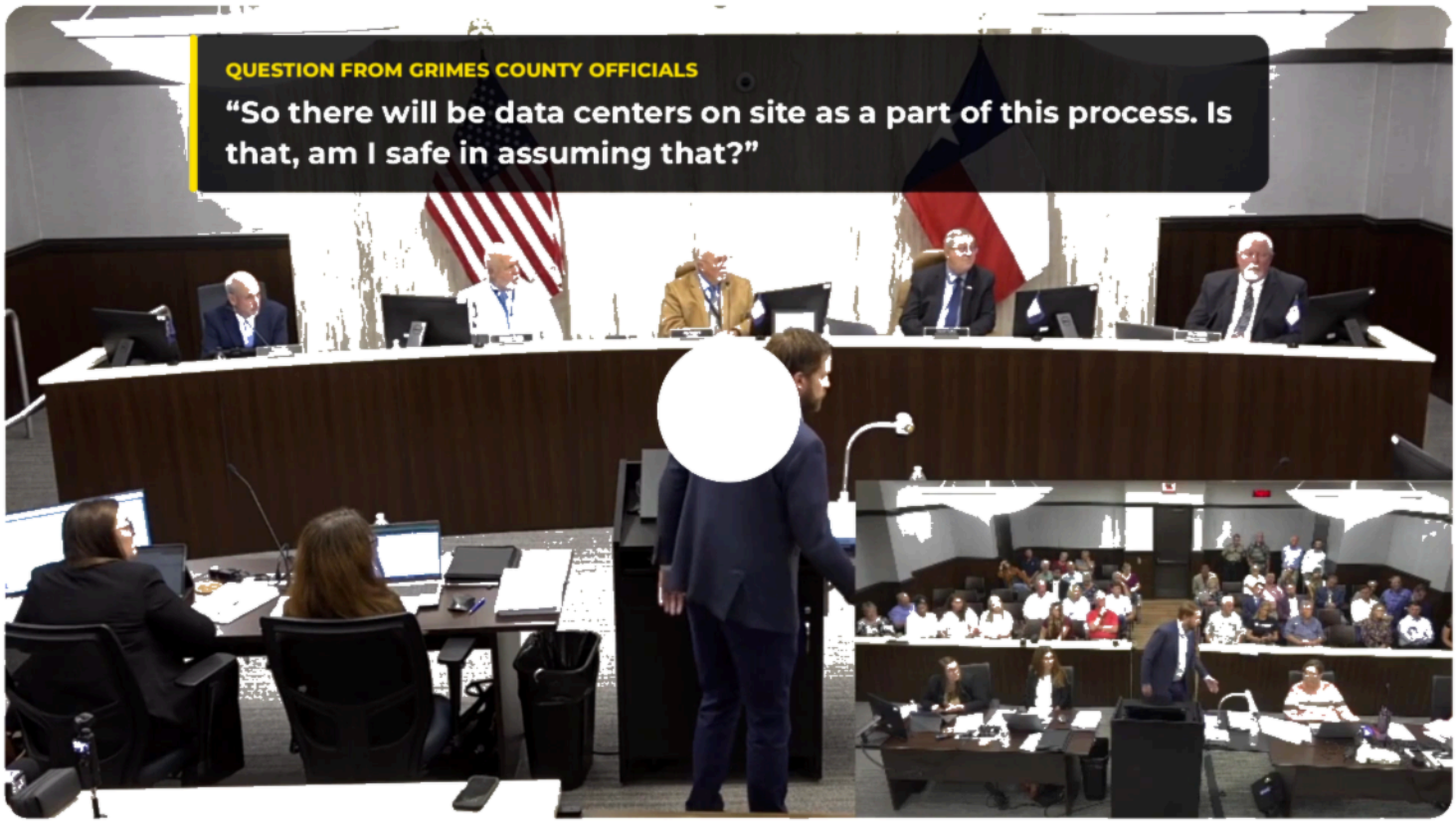
The Elon locations have a pioneering track record with us. We called Colossus 2 the first gigawatt datacenter in the world back in September 2025, when onsite gas was called a science experiment. We showed exactly how xAI bypassed the grid (and permitting!) with truck-mounted turbines, why the behind-the-meter playbook was going to spread to 40GW+ of behind-the-meter datacenters by 2028, and how the Anthropic and Google deals turned SpaceX into the most profitable neocloud on earth. Now, Colossus 2 could soon house the largest BESS deployment **in the world, with 5.9GWh already being installed, and more to come.**



Source:

This report unveils our analysis of SpaceX's "proprietary plan." From repurposing Starship's rocket building and launching campuses into datacenter sites, to the gargantuan BESS deployment, buying out homeowners to house construction workers, and relocating mobile turbines, this report covers it all.

For example, did you know TeraFab, Elon's 100M sqft, 10GW+ chip fab project in Texas, will likely also have a datacenter? See the clip below of SpaceX representatives talking to Grimes County officials.



Source: Local Filings

Keep reading to find out why we think the TeraFab datacenter will be for third party renting!

And beyond the paywall, we dive deeper into the likely SpaceX power solutions, another site that may house a datacenter, and potential pricing for future SpaceX contracts, build off our proprietary SpaceX Funding Model as part of our Capital, Compute and Markets model.

Fastest Build Times In The World

What does building two Stargate Abilenes in one year look like? Let's talk about the Colossus expansions, where Elon is already trying to buy hundreds of nearby homes to both soothe noise complaints **and provide construction worker housing**. We've already spoken about MiniHard in Memphis finishing construction in just ~5 months, but the newly purchased "Gun Range" plot just south of the state line in Mississippi will take ~4 months!



"Gun Range," Colossus 2, October 28th, 2026; Source:

To our knowledge, this would be the fastest greenfield datacenter ever built at scale. While most are fighting for 8-12-month build times, SpaceX has cut them in half.

Looking closer at Colossus 2, we see SpaceX trying to break its own record again. SpaceX's first retrofit at Colossus 1 took 122 days for 150MW, and Colossus 2 took just 91 days for 210MW. Now, SpaceX has taken the building (codenamed Project SPAM) directly in the middle of Colossus 2, and targets December to bring its first tranches online. With a construction start date of October 5, 2026, this could be shorter than the 91-day record, which itself broke the 122-day record; both are held by SpaceX.

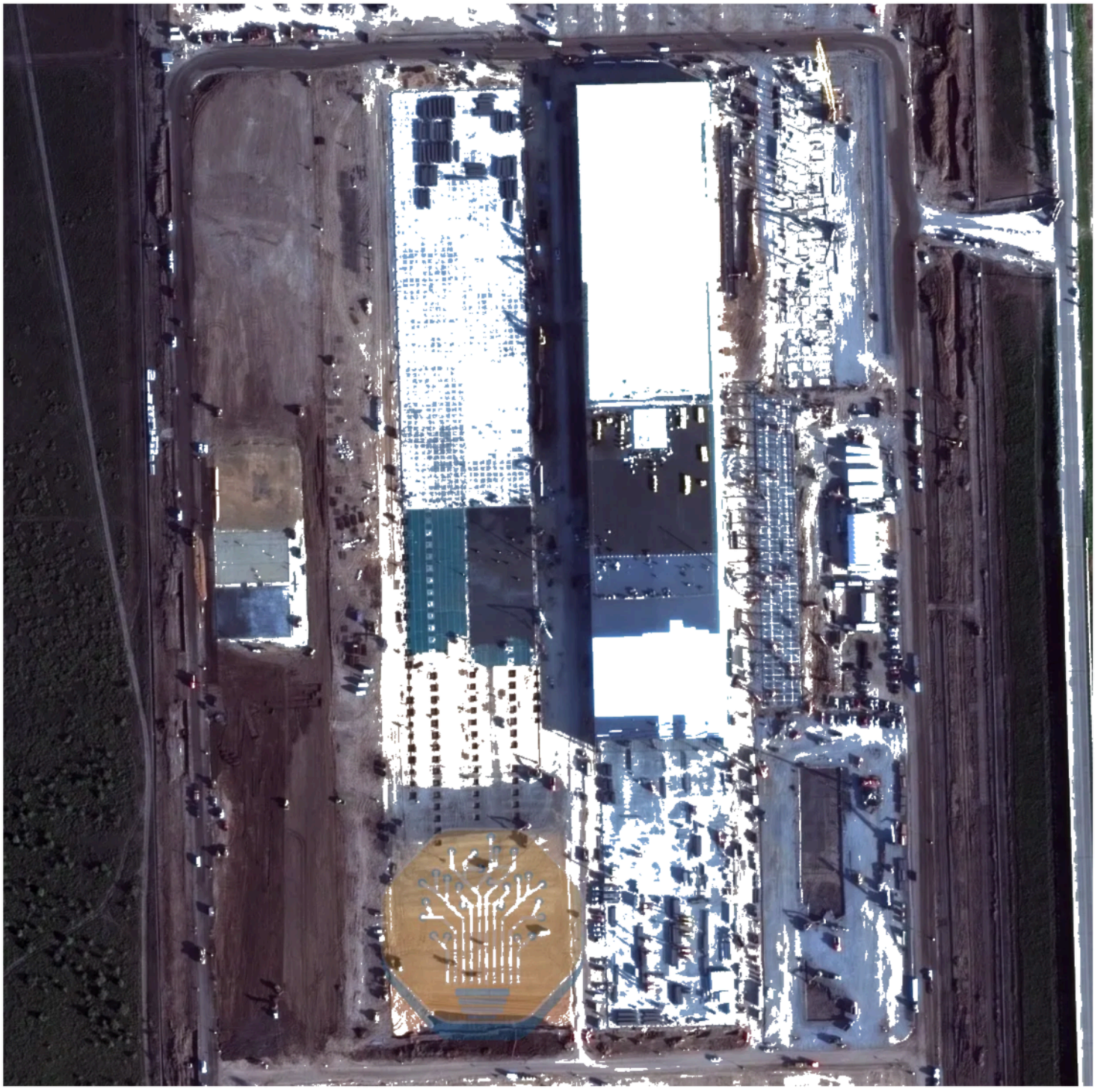


"Project SPAM," Colossus 2, Mississippi, October 28th, 2026; Source: ; Note the Megapacks and Chillers already being deployed!

Colossus expansions were to be expected, but repurposing sites from Elon's other ventures was not. For example, many are familiar with Elon's Starbase in Texas, traditionally used for rocket building and launching. However, as flagg ago to Datacenter Industry Model subscribers, this site will now house datacenters too!

The site went from simply clearing ground at the end of August to full construction by the end of September, and we now believe it will activ

datahalls in the coming weeks.



Starbase, Texas, October 29th, 2026; Source:

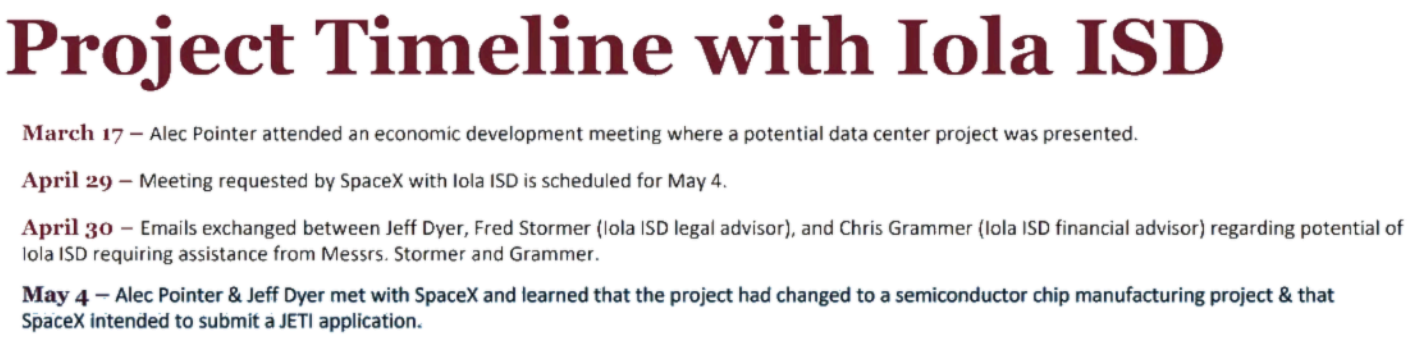
At this size, and with the knowledge of a 2027 timeline (meaning Vera Rubins), this site could be well over 1GW! Looking at the datacenter on the right, you can see that the steel mainframe is being built, while the roofing is actively following behind it. And on the left, you can see the transition from dirt to full preconstruction. These are multiple construction processes performed simultaneously, a visual representation of speed.

Lastly, we have medium-high confidence that TeraFab will have a datacenter too. That's right, the 10GW, 100M sq.ft chip fab venture from SpaceX will likely have a datacenter. We flagged this possibility ~3 months ago, and again 1.5 months, to Datacenter Industry Model subscribers, solely by examining preconstruction work and filings.



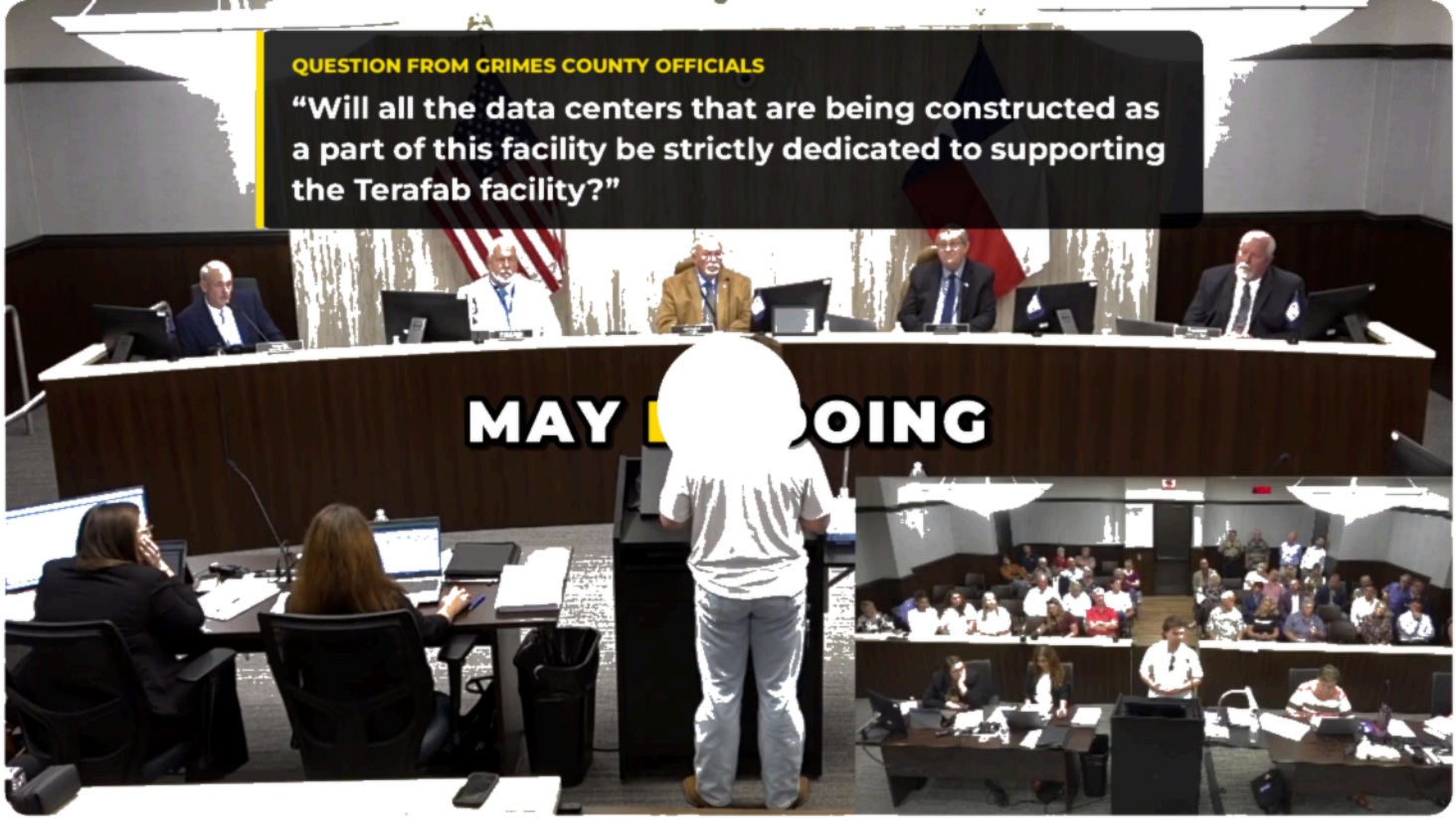
Source:

The project actually initially started as a datacenter and then quietly pivoted to TeraFab.



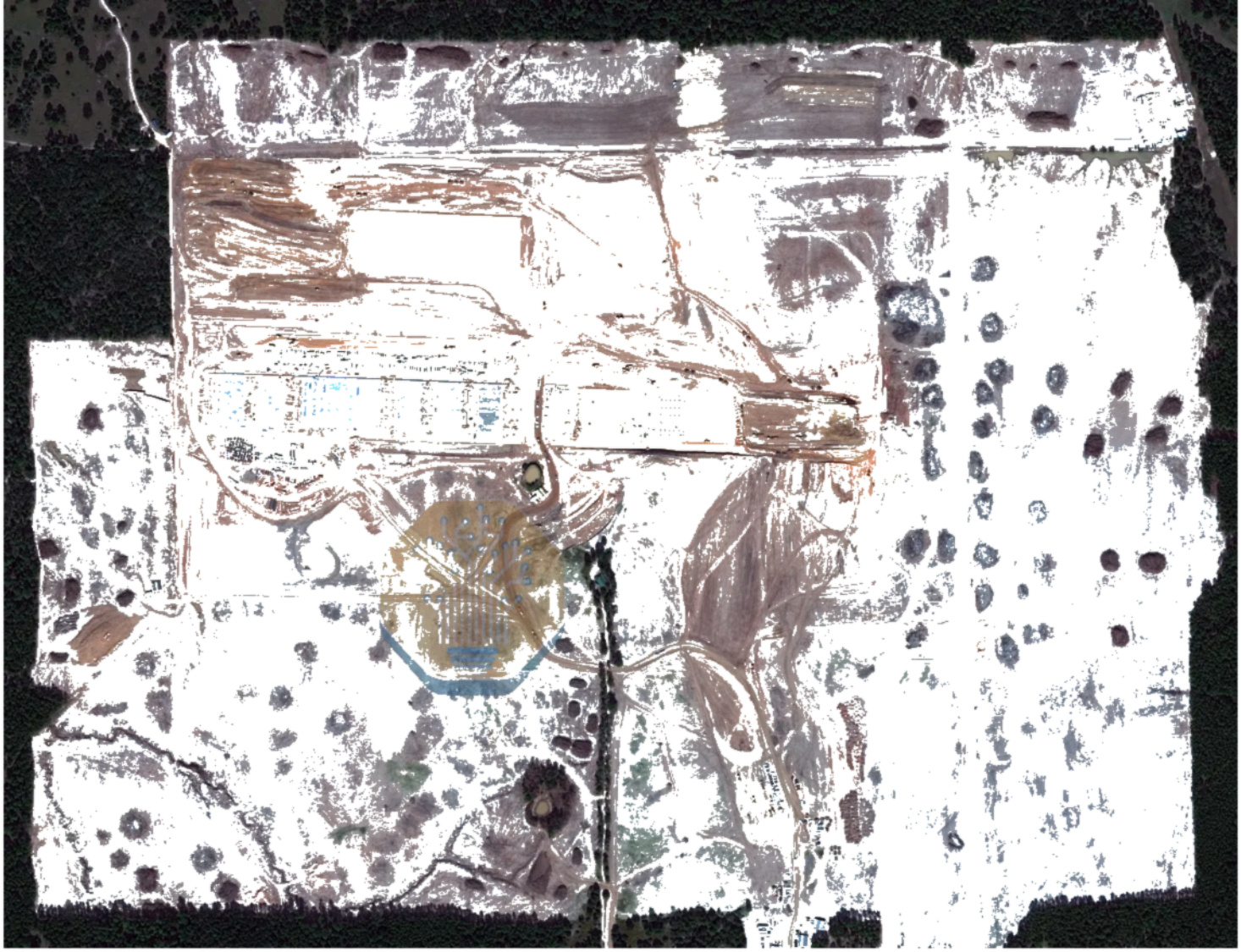
Source: Local Filings

We showed the clip at the beginning (August 2026) of the site housing compute; furthermore, the representatives do not confirm that the datacenter will be for SpaceX's use only, leaving room for third parties to rent the capacity too.



Source: Local Filings

The main remaining question is whether the current work on the ground is for one or more datacenters or for supporting facilities for TeraFab (like onsite gas, Central Utility Plant, etc.). We lean toward a datacenter for now, but suspect the vertical construction is moving slowly to ensure their JETI agreements/permits are fully compliant; otherwise, they may be subject to the TCEQ pauses or other regulatory scrutiny. Preconstruction work is so early that these pads can be pivoted a number of ways if datacenter work is not granted.



TeraFab, October 2026; Source:

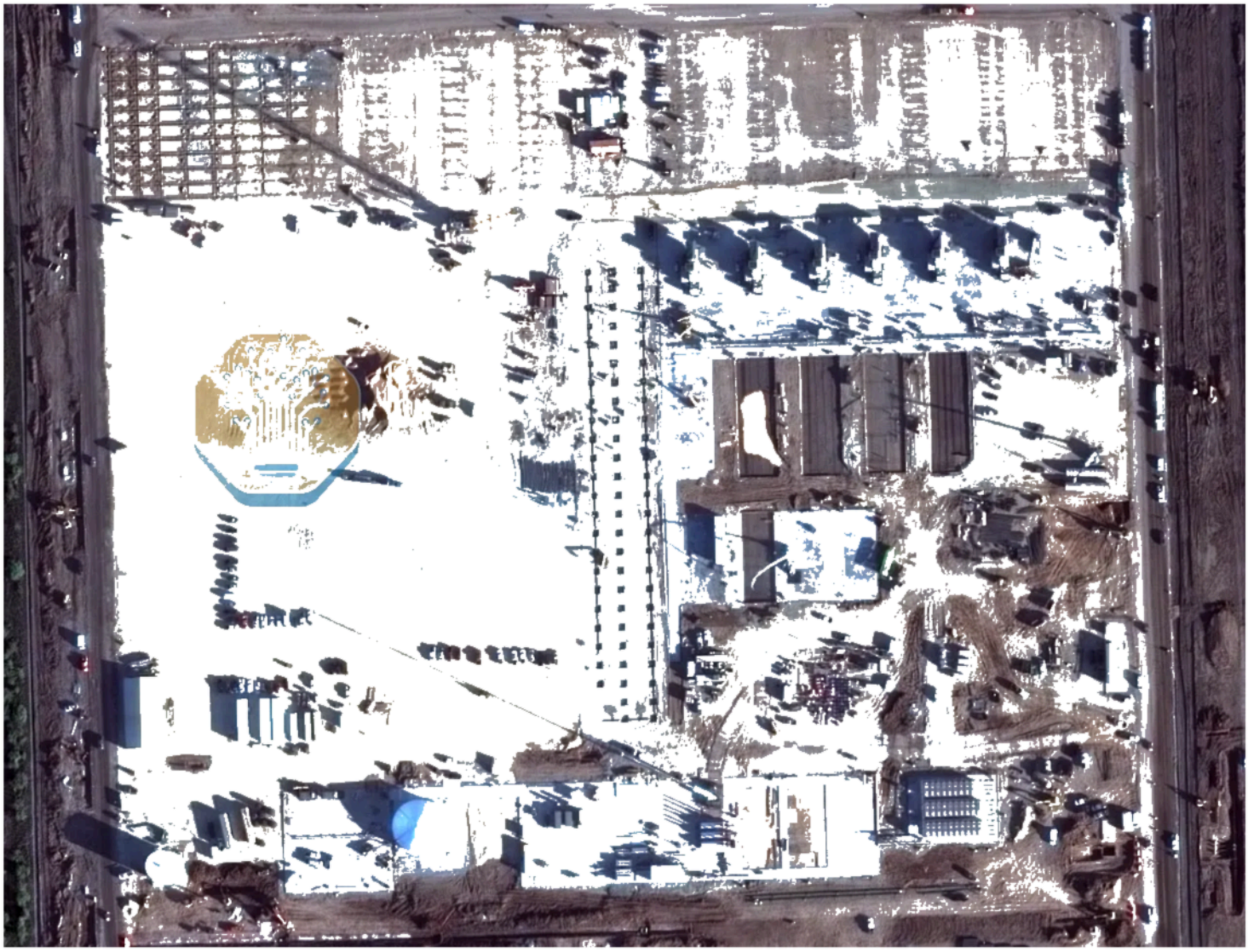
How Are They Building So Fast?

One thing often overlooked is that the Elon companies are some of the best hardware companies in the world. We mentioned in our previous newsletter that their labor can run at 3k workers per GW thanks to their top-tier engineers. However, we also believe that Tesla is manufacturing modular MEP equipment, allowing SpaceX to deploy so rapidly.

If SpaceX and Tesla can manage their global supply chains appropriately, their partnership can easily construct GWs with far fewer constraints than others. This is like Crusoe manufacturing their own Switchgear to skip lead times, but on a massive scale. Tesla will likely become more than a BESS merchant to SpaceX soon.

Largest USA BESS Deployment, Turbines, and A Grid Connection?

Now that we've walked through GWs worth of sites, how will they power them? So far, we track 8GW+ of likely behind-the-meter capacity for SpaceX. This includes deals such as FTAI, Solaris, and others that only our Energy Model subscribers get access to. We have discussed how SpaceX decides the power on the fly, and one amazing example is the new Starbase, Texas site, where APRs are being deployed just one month after vertical construction started!

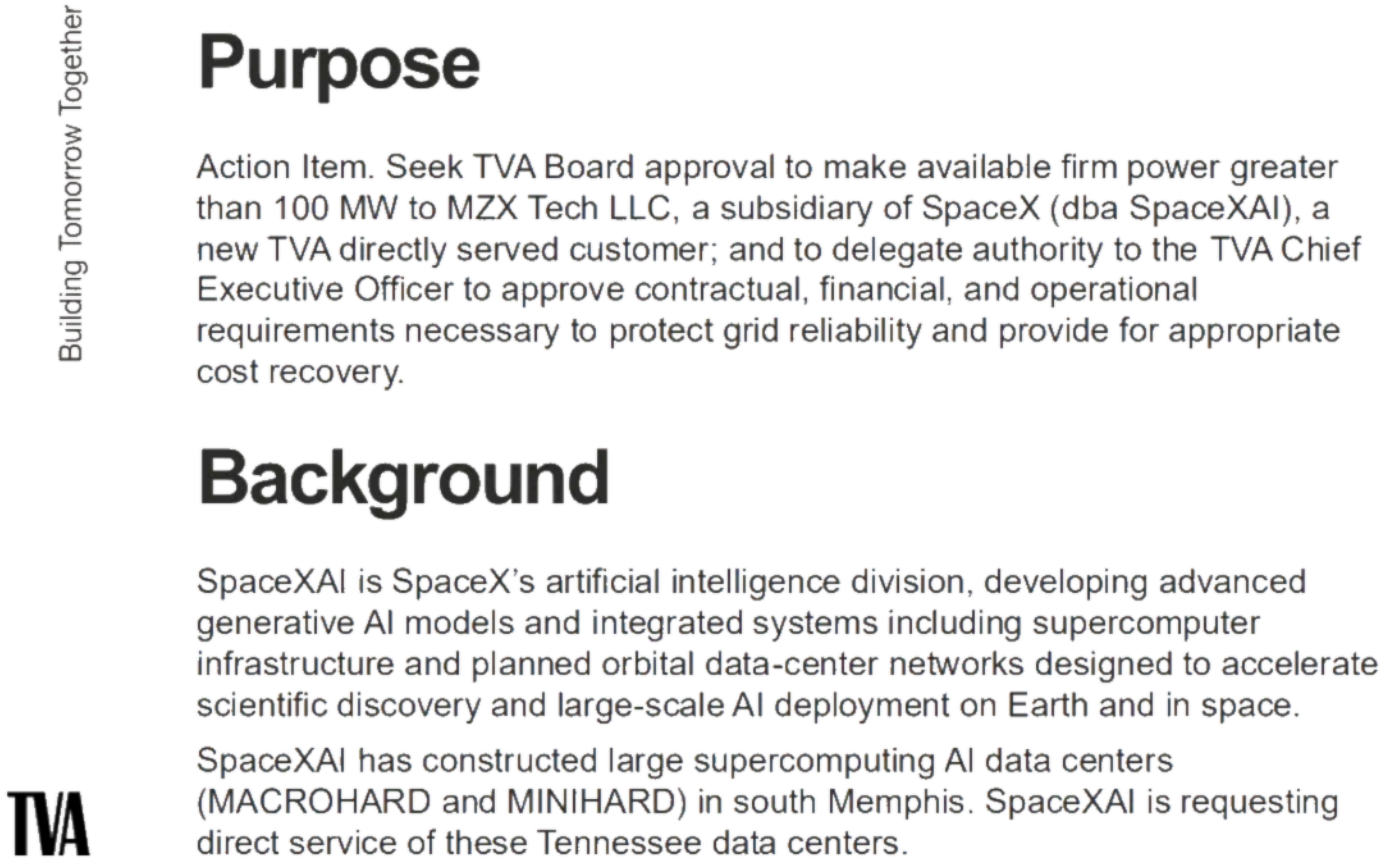


Starbase, Texas, October 29, 2026; Source:

The site may use >1GW of APRs, but judging by building size, this will not be enough. And looking at the (two!) pipelines underway, the site will likely have multiple GWs of power, and more turbines on the way. According to a TikTok with the Brownsville mayor, the site is building a fiber optic channel through the Port of Brownsville, as well as looking at leasing waterfront space (potentially for its own port). At such a massive scale, we suspect most of the temporary turbines from Colossus 2 will be relocated here.

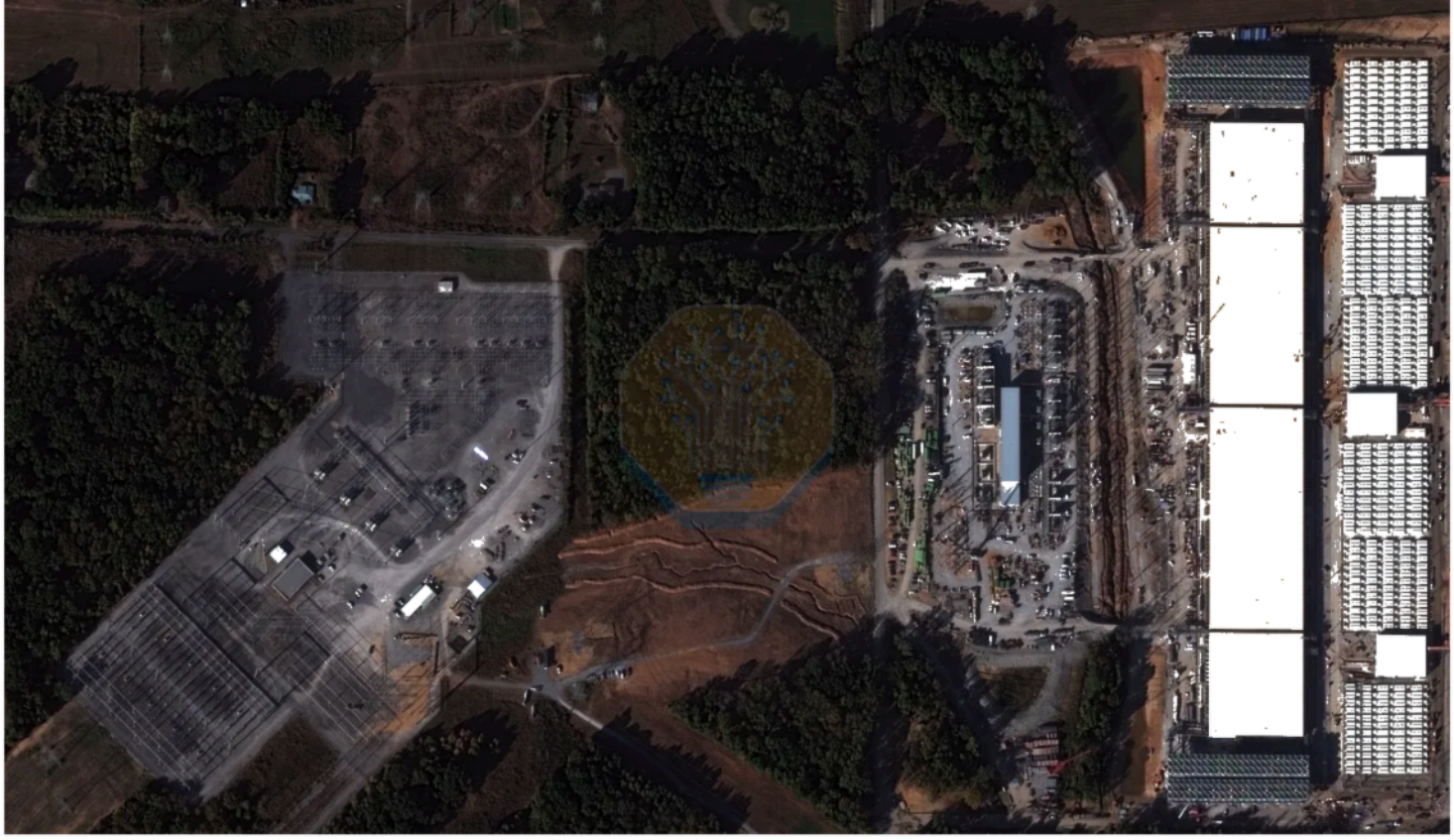
Next, let's move on to Colossus 2, where the opposite is happening: a grid connection. According to TVA (the region's utility), Macrohard (700MW) and MiniHard (450MW)

have both requested service for their facilities. For now, we assume this grid connection services Macrohard and MiniHard in full.



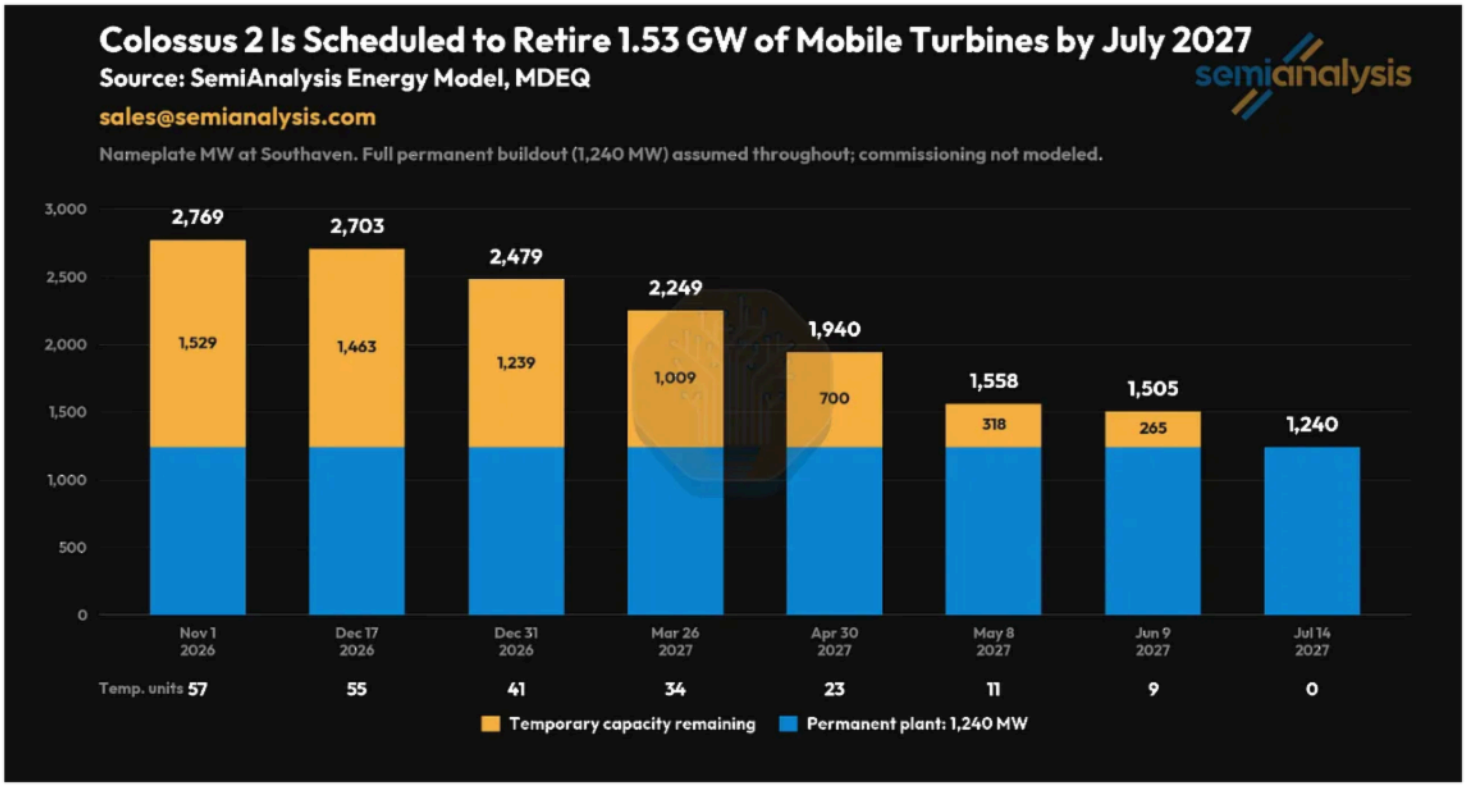
Source: Local Filings

We've already seen SpaceX building out the 500kV gas-insulated substation (GIS) to the left of MiniHard, which is scheduled to finish construction by December 31, 2026, and connect to the Freeport substation.



SpaceX GIS Substation, October, 2026; Source:

This comes at the perfect time, as the turbines at the Southaven power plant must be shut down. The site can legally operate 2.7GW nameplate right now, but only 1.24GW nameplate by July 2027, due to the binding requirement signed July 30, 2026.



Source: , MDEQ

But the eagle-eyed reader may notice: after subtracting the ~1.2GW grid connection, we're left with 1.3GW of compute… and 1.24GW of nameplate power generation… Recall, nameplate generation still takes a haircut on efficiency and derate, and IT MW doesn't represent the full facility load. There could be a gap upwards of 300MW. How does this get solved?

We think there are a few ways, and the Energy Model team will explore this power system in depth soon. But first: we think SpaceX has built the largest BESS field in the USA for a reason. With the BESS nearing 6GWh, we think the site will orchestrate gas and BESS to increase baseload, while the turbines cycle through charging them. If the datacenters are designed right (and our IT MW assumptions are correct), this could work. Given some clusters are customer-facing while others are for internal training, there could be an SLA uptime tiering to increase total capacity.



Colossus 2, Mississippi, October 28th, 2026; Source:

We suspect that with an ultralow PUE of ~1.10-1.15, variance in datacenter types (inference vs training, customer-facing vs internal usage), rack designs using less power (Project SPAM using half the fiber of others), and the oversized BESS, the project may still be able to cover a ~300MW shortfall.

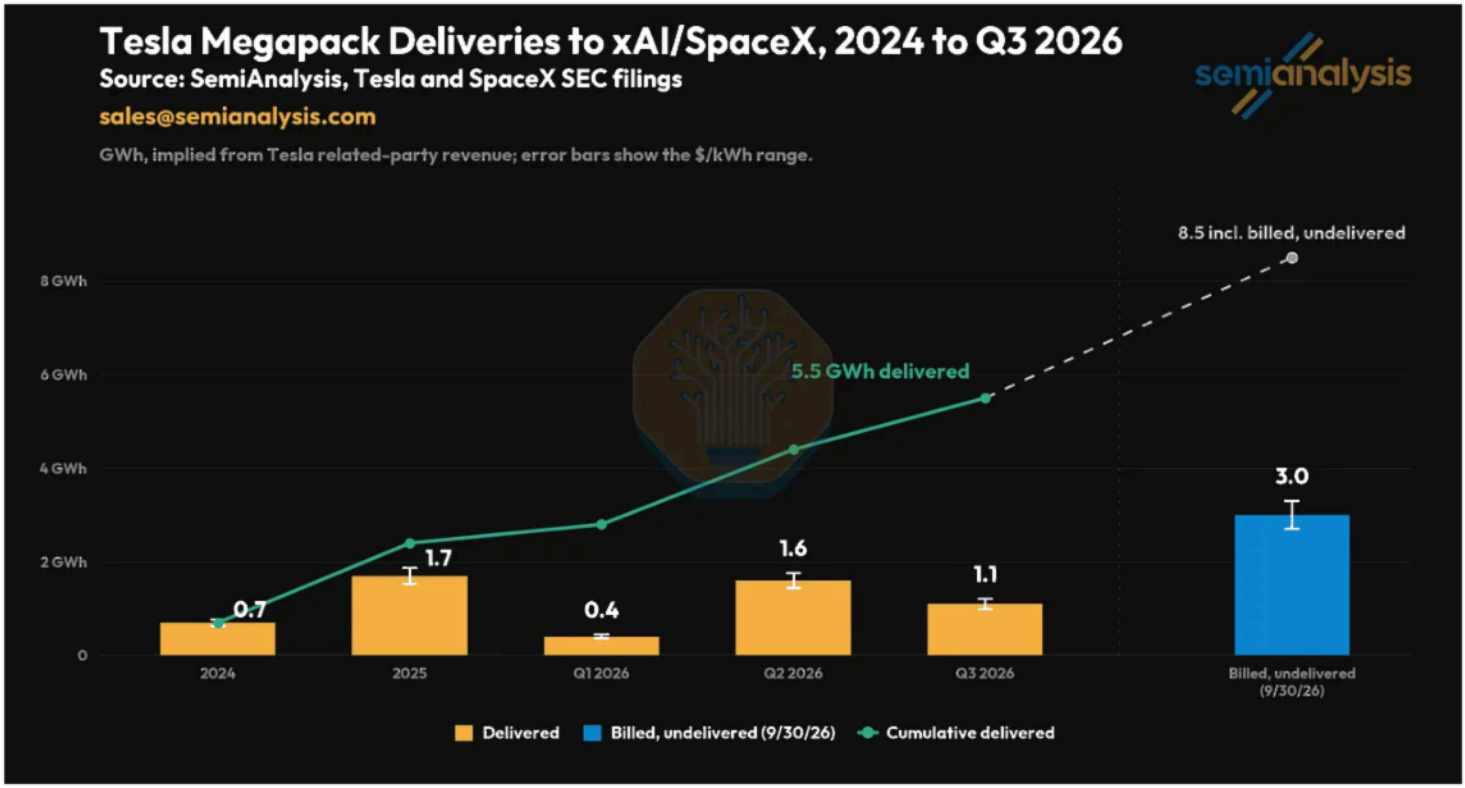
Beyond the paywall, we will further discuss the power situation, and how we think SpaceX economics could play out.

The Unknowns on Power

The first Doosan 380MW turbine is now on its way, marking the first of two in 2026, with another three in 2027, adding a total of 1.9GW of nameplate generation. While job listings suggest Doosans could be installed at Starbase, Texas, we still aren't sure. And what about the other orders? We know of several, like Solaris and FTAI, and likely multiple other GWs of orders on the way.

There are also other potential paths not yet announced. For example, looking at job postings and SpaceX's language, the vanes and blades foundry seems to be **only** for casting vanes and blades. To us, this implies that SpaceX will likely strike a partnership with a turbine OEM and fit out its longest-lead-time item itself.

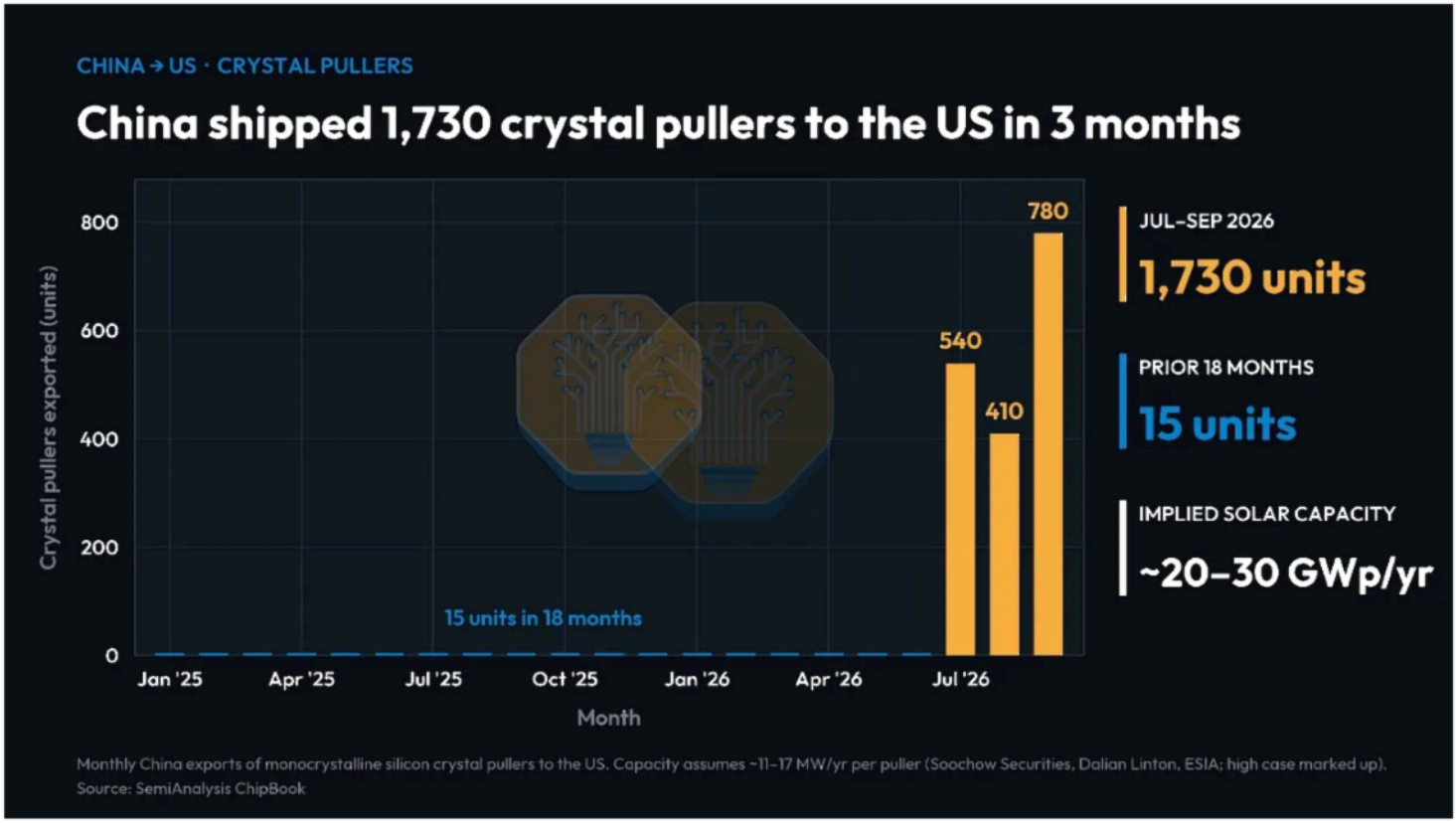
Additionally, we estimate that SpaceX is likely the largest buyer of Megapacks from Tesla, purchasing up to ~8GWh on the high end of cost. We suspect most of this is already delivered at Colossus 2, but Tesla is now almost sold out for 2027. We believe there is likely a large, signed but unbilled order of Megapacks for SpaceX that will soon appear in financials.



Source: , Tesla and SpaceX SEC filings

We know that most sites would like to use bridge power as a solution too, like TeraFab supposedly bridging to ERCOT/MISO down the line.

Lastly, we understand solar to be a part of the "proprietary plan," and our ChipBook team recently highlighted the 1,730 crystal pullers imported.



Source: SemiAnalysis ChipBook

According to our ChipBook team, we may see the first solar panels installed in late 2027, and at full output, this can produce ~25GWp/year, or, applying a roughly 20% ELCC, add 4-6GW of firm capacity at full output. This may be used down the road to strike a deal with utilities, or to build a behind-the-meter solution given Tesla's Megapack supply.

Another SpaceX Datacenter Campus Is Coming

It's early innings, but we think Starbase Louisiana could follow Starbase Texas' path. Looking through local minutes, we see Elon does not preclude the site housing a datacenter. With the onsite generation involved, the site is a prime suspect in our sleuthing.

[1:22:55] Uh so uh currently so we're we're gonna be launching



[1:23:10] AI and data centers in the space, that's I don't 100% sure thing. Um whether or not there's one uh that could be constructed at this site uh you know is still to be determined. Uh but you know our long term uh goal and vision is that

[1:23:26] constructing data centers on Earth is going to take too much time to meet the demand of compute. And so we designated those data centers as terrestrial data centers. And we are definitely long term focusing on building

Source: Local Filings

We see that dredging of the waterfront is already underway, and heavy-road construction is slated to begin in 1Q2027. We suspect this site could add >1GW to the SpaceX buildout in 2027.

Is It Actually Happening? Economics, Orders, and Funding

SpaceX has sold more than 1GW at close to $50M per MW per year, about 4x the $12-16M five-year market rate, with a payback period of under a year according to CFO Bret Johnsen. We've even heard of customers being quoted over $15/hr for GB300! But that pricing at scale may not last. Its deals to date are roughly six-month contracts with 90-day outs and no prepayment (the Anthropic and Google agreements are non-cancelable only through January and March 2027), which worked when supply was so tight. But as explained in our recent article, 2027 will see +50GW of datacenter capacity - SpaceX needs AI labs to keep beating revenue expectations and "under forecast" their own compute needs. In addition, SpaceX launched its Cloud business when its balance sheet had close to $100b of net cash, but that's quickly being eroded and funding an additional+7GW in 2027 will require hundreds of billions of dollars.

To increase the demand pool and ensure "easy" funding of GPUs, we expect SpaceX to take lower pricing and a higher prepayment, such as 6-12-month terms, ~50%+

prepayment, and ~$30M per MW per year on the low end.

On the chips side, we see two phenomena that are more supportive of SpaceX. First, supply of VR is quickly getting tighter, and we're seeing early signs our view of AI chips becoming the binding constraint (instead of power & datacenters) will prove true by end of 27 / early 28. Second, many neoclouds were given Nvidia allocation in hopes of landing an offtaker and datacenter, the AI Project Trinity, to fund the operation. But as capital markets have significantly tightned, funding is getting much harder and Nvidia could have less confidence on their ability to execute.

As such, many Neoclouds will be "forced" to find hyperscale offtake instead of competing on SpaceX's lucrative on demand market. Lower competition and tight chip supply are both supportive of a stronger-for-longer pricing power for SpaceX.

Washington May Want the Turbines On

One more reason we think the Elon machine keeps going: Washington may want them to. Recall that the NAACP sued xAI in April under the Clean Air Act over the unpermitted mobile turbines at the Southaven plant powering Colossus 2, asking the court to shut them down until permits are in place. The Trump DOJ intervened in June, arguing the suit "threatens American national, economic, and energy security" because Grok supports Department of War operations, and when the judge sat on that motion for three months, DOJ took it to the Fifth Circuit. Judge Debra Brown let the government into the case on October 19 but refused to let it kill the suit, and on October 30 rejected xAI's claim that trailer-mounted turbines are "mobile sources" exempt from permitting. The case is now heading toward a preliminary injunction fight, with the federal government sitting on xAI's side of the table.

The regulatory track is moving the same direction. The Coalition of Mobile Electric Turbine Users (COMET), an industry group of turbine makers and users, petitioned EPA to regulate trailer-mounted turbines as "nonroad engines", which would take them out of Title V and New Source Review permitting entirely. EPA signaled it would do exactly that in January's turbine standards and sent the proposed Nonroad Combustion Turbines Rule to the White House for final review on October 15; if it is finalized, the very question the NAACP is litigating gets answered by rulemaking in xAI's favor, on top of the July 2025 executive order already directing EPA to expedite permitting for datacenter power, gas turbines included.

When asked this week about Democrats investigating Musk's companies if they win Congress, Trump said "we'll have to protect them" and floated pre-emptive pardons. None of this guarantees the turbines stay on, but it is a lot of federal weight pushing toward keeping SpaceX's power running and lightening the permitting burden on everything in this note.



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