

Data Centers: A Debate Handbook

Argue either side with the proof behind it. Written in plain English. Built only from arguments real advocates actually make, with Chicago-style citations and biographical notes on every source.

Compiled September 13, 2026. Revised September 16, 2026 (Point 7 on noise, scale and character added to both sides, with sources 32 to 39).

How to use this

You should be able to stand up and argue either side of this and win. So this handbook does six things for each side, not one, across seven arguments per side:

1. **The case.** Each argument explained in plain words first, with the numbers and the source attached after.
2. **Say it like this.** The actual sentence to use out loud.
3. **What they will say back.** At the bottom of every single point: the other side's best counter to that exact point, so you are never surprised.
4. **Your comeback.** Right underneath it: how to answer that counter and keep your point standing. This is where debates are won.
5. **Cross-examination.** Questions to ask them that they cannot answer comfortably.
6. **Your soft spots.** Where your own side is weak, so you are never caught off guard and never overclaim.

Every point is a complete unit now: your argument, their response, your answer. You never have to flip to another page to find out what is coming at you. And because the counters under Part 3's points are the same lines Part 4 teaches (and the reverse), reading both parts shows you the whole battlefield from both hills.

Read Part 1 first. It explains how electricity bills, power grids, and local taxes actually work, in everyday language. Almost every argument in this debate is really an argument about one of those three things. If you skip it, the rest will sound like jargon. If you read it, the rest is easy.

On the citations. Sources are numbered 1 through 39 and the number never changes. Source 16 always means the Harvard Law study. This is not strict Chicago practice, where each new mention gets a fresh number, but it turns the notes into a source key you can say out loud: "that is source sixteen, Harvard Law, March 2025." Every note is in full Chicago form. The bibliography at the back is in Chicago bibliography form and includes a biography of every author, what they do, and who paid for their research.

The single best move in this debate: quote the other side's own sources back at them. There are three chances to do it, all flagged in the bibliography.

Part 1. Start here: the basics in plain English

You do not need any background. Here is everything the debate actually rests on.

What a data center is

A data center is an enormous windowless building filled with computers. Not a few computers. Tens of thousands of them, stacked in rows like library shelves, running twenty four hours a day, every day.

Those computers run the internet. When you stream a movie, check a bank balance, or ask an AI a question, a computer inside a building like this is doing the work.

Two facts about them drive this entire debate:

- **They eat enormous amounts of electricity.** One large data center can use as much power as a small city.
- **They employ very few people.** Once the building is finished, it mostly runs itself. A building the size of several football fields might have a few dozen permanent employees.

That combination, huge power use and tiny headcount, is unusual. A steel mill uses a lot of power but employs thousands. A law office employs hundreds but uses almost no power. Data centers sit at one extreme, and that is why the normal rules of thumb about "attracting a big employer to town" do not apply cleanly here.

How your electricity bill actually works

This one matters most, so take your time here.

The power company spends money on two things: **power plants**, which make electricity, and **wires**, which carry it to you. Building both is expensive.

The power company is not allowed to just pick its own prices. A government referee, usually called a utility commission, reviews the company's spending and decides how to divide it up among all the customers.

Here is the key idea. **The referee sorts customers into groups.** Homes are one group. Small businesses are another. Big factories are another. Each group gets its own pricing, because each group costs a different amount to serve.

Now imagine a gigantic new customer shows up and says it needs as much power as a small city. The power company has to build new plants and new wires to serve it. That costs billions. **The whole fight is over who pays for those billions.**

- If the new customer pays the full cost, nobody else's bill changes.
- If the new customer pays only part of it, the rest gets spread across everyone else's bill. That is called **cost shifting**, and it is the single biggest accusation in this debate.

Think of a group dinner. Ten people order salads. One person orders lobster and three bottles of wine. When the check comes, do you split it evenly, or does the lobster person pay for the lobster? Splitting it evenly is cost shifting. The entire argument is whether data centers are paying for their own lobster.

Two more terms you will hear. They sound similar and they mean different things:

- **Who caused the cost.** Who ordered the lobster.
- **Who gets billed for it.** How the check gets split.

These are not the same question, and both sides lean on that gap. Remember the dinner and you will never get lost.

What a "capacity auction" is, and why it made prices explode

This sounds technical. It is not.

The electric grid has to be ready for the single worst day of the year, usually the hottest afternoon in August when every air conditioner in the region runs at once. On that one day, demand spikes.

So the grid operator pays power plants **to promise to be available**, whether or not they end up running. It is a standby fee. Think of paying a babysitter a retainer to keep Saturday open, even if you end up staying home.

Those standby promises get bought at an **auction**. More expected demand means a higher price, and everyone's bill reflects it.

Here is why this matters. Data centers are being announced faster than power plants are being built. The auction saw demand jumping while supply did not keep up, and the price went from **\$28.92 to \$329.17** for the same standby promise.¹⁸ More than ten times higher. Everyone in that region pays it, including families who have never heard of a data center.

What those dollar figures actually are. That \$28.92 and \$329.17 is not anyone's bill. It is the wholesale standby price: what one megawatt of power plant capacity gets paid per day just to stay ready. Your utility buys standby for all its customers at that price, then folds the cost into everyone's bills. So the tenfold jump does not make home bills ten times higher, because standby is only one slice of a bill, roughly a tenth to a quarter depending on your utility. But it is a real slice. When the price spiked, New Jersey's own state auction translated it into residential increases of about 17 to 20 percent

for the year, which on a typical bill is in the neighborhood of \$25 a month.²⁷ PJM's own gentler estimate was 1.5 to 5 percent in some states.²⁷ The honest summary: somewhere between a few dollars and about \$25 a month per household, depending on the state, every month, for something invisible.

The other side has a real answer to this, and it depends on the dinner distinction above. Ordering the lobster and splitting the check are different steps. Keep that in your pocket, because both sides need it.

How local taxes and "tax breaks" work

When a company puts up a big building in your county, it pays property tax on it. Big building, big tax bill, and that money funds schools, police, and roads. This part is real and it is large.

But states compete to attract these buildings. So they offer **tax exemptions**: build here, and you will not owe sales tax on all those computers.

Important: this is not the state writing a check. It is the state **choosing not to collect** money it otherwise would have. The effect on the budget is identical. Less money comes in.

So there are two separate questions, and people constantly mix them up:

1. Does the county collect a lot of property tax from the finished building? Often yes, sometimes a great deal.
2. Did the state give away a lot of other tax money to get it? Often yes, sometimes more than it got back.

You can honestly argue either side depending on which of those two you weigh more heavily.

What "flexible load" means

The grid is built for that one worst day. Like a highway built wide enough for the worst traffic jam of the year. Which means that most of the time, there is empty road.

So researchers asked a good question: what if a data center agreed to **ease off during the few busiest hours**? Then it could use all that empty road the rest of the year without anyone having to build new lanes. New lanes are the expensive part.

That is "flexible load," and it is the strongest argument the pro side has. The catch, and it is a real catch, is that agreeing to ease off is currently **voluntary**. Most contracts do not require it.

What "who holds the risk" means

A power company builds a billion dollar plant for a data center. Then the data center cancels, or shrinks, or goes bankrupt.

Somebody still has to pay for that plant. It exists. It cost real money.

If the contract says the data center pays regardless, the company holds the risk. If it does not, the cost lands on everyone else's bill. The good version is called a **minimum take** contract: you reserved the table, you pay for the table, whether or not you show up.

One unit you need

Electricity gets measured in **terawatt-hours**, written TWh. Treat it like a gallon. It is just a unit of measurement. One terawatt-hour is roughly what 95,000 American homes use in a year. When you see "192 TWh," read it as "a very large amount, and here is the yardstick."

That is everything. Every argument below is about power bills, the grid, taxes, water, air, or who got asked. You now know enough for all of it.

Part 2. What both sides already agree on

Do not waste time fighting these. Conceding them early makes you look honest and buys credibility for the fight you actually want.

What	The number	Who says so
Electricity U.S. data centers used in 2024	192 TWh, about 4.7% of all U.S. electricity	Berkeley Lab, a federal energy laboratory ¹
Best estimate for 2030	649 TWh, about 11.8% of all U.S. electricity	Berkeley Lab ¹
Full range of possibilities for 2030	578 to 782 TWh (9.5% to 15.3%)	Berkeley Lab ¹
What data centers add to Virginia each year	74,000 jobs, \$5.5 billion in wages, \$9.1 billion to the state economy	Virginia's legislative watchdog ²²
When those benefits happen	"mostly during initial construction"	Same study ²²
Effect on everyone else's power costs	costs "will likely increase" for all customers	Same study ²²

Read that table twice. **Both sides accept every line.** Roughly a tenth of the nation's electricity, a real economic contribution, benefits concentrated in the construction phase, and costs that spill onto other customers. The debate is entirely about what you should do about it.

Berkeley Lab is Lawrence Berkeley National Laboratory, a research lab run for the U.S. Department of Energy. It produces the official federal count. Virginia's watchdog is JLARC, the Joint Legislative Audit and Review Commission, the state legislature's nonpartisan investigative agency. Neither takes a side, which is exactly why both camps quote them.

Part 3. Arguing AGAINST data centers

A. Your case

Point 1. Regular families are paying part of the bill, and the deals are kept secret so nobody can check.

The short version: When a data center needs new power lines and power plants built for it, somebody has to pay. A lot of that cost is landing on ordinary customers instead of on the data center. And the contracts are sealed, so the public cannot verify it.

What this actually means: Go back to the group dinner. The power company and the data center negotiate a private deal on how much the data center will pay. Then the power company asks the referee to keep that deal **confidential**, meaning the public is not allowed to see it. So when your bill goes up, you cannot check whether the big customer paid its share, because the receipt is sealed.

The proof: Two researchers at Harvard Law School, Eliza Martin and Ari Peskoe, read through nearly fifty of these utility cases. They concluded that rules originally built to share the cost of keeping the lights on for everybody are now being used to make the public pay for equipment that exists to serve a handful of extremely rich companies. Their sharpest finding is about the secrecy: utilities routinely ask for confidential treatment, which limits public scrutiny and narrows what the referee can realistically do. In their words, the complexity of the process conceals utilities overcharging captive customers in order to funnel money to their own side businesses.¹⁶

How big is that, really: Unknowable, and that is the entire point, so be honest about both edges of it. A sealed contract is not proof of a bad deal. It is proof that nobody outside the room can check the deal, in a system where you are legally required to buy the product. Concretely: when your utility asks the referee for a rate increase, the data center's contract is in the file with the numbers blacked out. Your consumer advocate argues about a document they cannot fully read. So argue the checking, not the cheating. The moment you claim to know what is inside the sealed deal, you are guessing, and they will catch you guessing.

Say it like this: "I do not have to prove the exact dollar amount. The public is being handed a bill it is not allowed to inspect. That by itself is the problem."

Why this is strong: It does not require you to win a math fight. It is an argument about fairness and transparency, and everyone understands both.

What they will say back: "Harvard read legal paperwork and made a fairness argument. It never measured a single dollar actually moving onto anyone's bill. The one study that tried to measure it, by the consulting firm E3, found no evidence that families are subsidizing data centers."⁸ A smart opponent will then concede the secrecy and say the contracts should be public, to take the sting out of your point.

Your comeback: Their measuring study was paid for by the Data Center Coalition, the industry's own lobbying group, which reviewed it before publication. It is printed on the report's acknowledgments page. And the report's own fine print admits only a few studies exist, most show correlation rather than cause, and the risk "is not absent."⁸ Say: "Not finding something in a nearly empty filing cabinet is not proof it is not there." Then, if they conceded the secrecy, do not let it float away as a nice gesture. Pin it: "Then you will support a rule making every one of these contracts public, starting now?" If sealed deals were fair deals, nobody would need to seal them.

Point 2. The grid's own watchdog blames data centers for billions in higher costs.

The short version: The standby fee everyone pays to keep power plants ready went up more than ten times over. The independent referee who polices that market says data centers are the biggest reason.

What this actually means: Remember the babysitter retainer. Across thirteen states plus Washington, DC, there is a grid operator called PJM that runs this standby auction. Every household in that region pays into it. The price exploded because expected demand jumped while new power plants did not arrive fast enough.

The proof: PJM has an independent watchdog, a firm called Monitoring Analytics, whose entire job is checking whether that market is run fairly. It reports to federal regulators, not to PJM's management. It found data centers responsible for **\$6.3 billion, or 38 percent, of \$16.4 billion** in charges from one recent auction, and that across the last four auctions, data center related charges came to nearly half of \$63.6 billion in total.¹⁷ The standby price went from \$28.92 to \$329.17 and then hit its ceiling of \$333.44. PJM expects peak demand to grow by 32 gigawatts by 2030, and all but 2 of those gigawatts come from data centers.¹⁸

How big is that, really: The PJM region serves about 65 million people. Spread \$6.3 billion across them and it is nearly \$100 per person, for one year of standby charges alone, before anyone uses a single unit of electricity. In practice it does not arrive evenly, because businesses pay a large share first and pass it along in prices, but the money all starts on that region's electric bills. On a single home's bill, the whole price spike showed up as somewhere between a few dollars and roughly \$25 a month depending on the state, with New Jersey households near the top of that range.²⁷ Small enough that many families never noticed why, large enough that it is real money, every month, with no end date announced.

Say it like this: "That is not an environmental group saying this. That is the official market watchdog, the one whose job is policing the grid operator itself. They put a number on it. \$6.3 billion in a single auction."

Why this is strong: The source is nearly impossible to smear. The watchdog has publicly criticized PJM itself, so it is nobody's ally.

What they will say back: The group dinner distinction, used against you. "The watchdog counted who caused the cost, which nobody disputes. What a family actually pays depends on how the check gets split, and that is exactly what the new rules govern: at least 38 special rules for giant customers since 2018, and Virginia's new customer class that makes data centers pay their own way."⁸ ⁹ They will also note the watchdog blames other things too, like old power plants retiring and the market's own design.

Your comeback: Timing. The auction charges are not a forecast, they already happened and already landed on bills across thirteen states: nearly half of \$63.6 billion over the last four auctions.¹⁷ The rules they are bragging about came after the money moved, and the Virginia protections do not even start until January 1, 2027.⁹ Say: "You are describing a fix for a check that has already been paid. Who refunds the last four years?" On the other causes: agree those exist, then repeat that the watchdog still named data centers the primary reason, and it is the referee, not you, saying so.

Point 3. The jobs do not show up, and states are paying enormous amounts for the few that do.

The short version: These buildings are designed to run with almost nobody inside. Meanwhile states are giving away more in tax breaks than they collect back.

What this actually means: There is an old assumption that a big investment means a lot of jobs. It is usually true. It is not true here. The money goes into computers and cooling equipment, not payroll. So a county can host billions of dollars of construction and end up with a permanent headcount you could fit on a school bus.

The proof, part one, the jobs: Sean O'Leary at the Ohio River Valley Institute argues data centers are capital-heavy and labor-light by design, so they create few jobs and put little money into the local community, and that the impressive investment figures simply do not translate into local benefit. His evidence is regional history: the thirty biggest gas-producing counties in Appalachian Ohio, Pennsylvania, and West Virginia posted far better than average economic growth during the fracking boom, and **still lost jobs and still lost population**.¹⁹ Big numbers on paper, empty storefronts in real life.

The proof, part two, the tax giveaways: Good Jobs First tracks these deals using the states' own legally required financial disclosures, so these are governments' own books, not an advocacy group's estimates. Georgia, Texas, Virginia, and Ohio each have exemptions capable of costing more than **\$1 billion a year**. Ohio's cost jumped from \$555 million in 2024 to **\$1.6 billion in 2025**, which works out to roughly \$330 per Ohio household in a single year. Indiana gave up \$655 million, with more than 83 percent of it going to a single company, Amazon. Texas gave up \$1 billion in one year. Oregon handed \$616 million in property tax breaks to facilities owned by Amazon, Apple, Alphabet, and Meta. And states that actually measured the return found they **lose between 52 and 70 cents on every dollar they give away**. Fourteen states with these exemptions publish no annual total at all.²⁰

What that 52 to 70 cents actually measures, because this is where the honest fight is: The natural objection is: "Sure, the state skipped the sales tax, but now there is a building paying property tax that paid nothing before, plus income tax from workers. Doesn't the math flip after a few years?" Virginia ran exactly that experiment. Its watchdog added up a **full decade**, 2014 through 2023, of everything the state got back because the buildings existed: income taxes from the workers, corporate taxes, sales tax on everything not exempted, all of it. The answer was **48 cents returned for every dollar given up**.²² Ten years in, the flip has not come, and here is the reason it does not come with time: the exemption is not a one-time discount on building the place. It covers the computers, and data centers replace their computers roughly every three to five years. Every refresh is a new tax-free purchase, forever, for as long as the building runs. The giveaway renews itself on the same schedule the benefit does.

Now the part of the objection that is genuinely right: **the property tax is real, and it goes to a different pocket**. The sales tax exemption is the state's loss. The property tax windfall belongs to the county, which is exactly why Loudoun County can cut its tax rate ten years running while Virginia as a state gets back 48 cents on the dollar. Both things are true at once. When you argue this point, say which pocket you are talking about, because your opponent will happily switch pockets mid-sentence.

And the last piece, the "without the exemption there would be no building at all" argument: that is only true if the tax break is what won the building. The best pro-side study found the incentives are just 2 percent of the money behind the big company-owned facilities.²¹ Those companies pick sites for power, land, and fiber. For them, the exemption is a bonus on a decision already made, and a bonus for a decision already made is pure loss.

The proof, part three, and this is your best shot: Use their own study. The strongest pro-data-center employment research, by two economists at Brookings, found that tax incentives make up only 2 percent of the investment in the giant company-owned facilities, but **62 percent** of the investment in the rental facilities.²¹ Translated: the buildings that produce the better jobs barely need the subsidy, and the subsidy is flowing overwhelmingly to the ones that produce fewer.

Say it like this: "Virginia measured a full decade of this and got back 48 cents on the dollar. That is not my estimate, that is the state's own audit. And the industry's own best jobs study says the subsidy flows hardest to the buildings that create the fewest jobs."

What they will say back: They will not claim thousands of jobs, the good ones know better. Expect four moves. First, the honest numbers: the Brookings study found computing employment up 56 percent, roughly 100 to 200 permanent jobs per county, and home values up 2 to 5 percent.⁶ Second, the pivot to construction: electricians' union hours doubled to 28 million a year, 600 new apprentices in one year, and it is unions saying so, not companies.⁷ Third, your own 48-cent figure turned around: the same Virginia audit found that 48 cents is nearly **three times better** than the 17-cent average return of the state's other sales tax exemptions, and a 2026 state incentive evaluation ranked the data center break Virginia's second-best incentive, producing \$6.10 of labor income for every exempted dollar.^{22 28}

Fourth, the multiplier: "the industry supports 5.5 million American jobs, because every direct job supports 4.5 more in the supply chain."³¹ Fifth, their smartest move: they may simply agree to cap or kill the tax breaks, splitting the subsidy question away from the industry entirely.

Your comeback: On "best of a bad bunch": being the least money-losing giveaway is still losing money, and 48 cents back is a failing grade on any test. On the \$6.10 of labor income: ask what share of that is construction-phase wages that end when the building is finished, because that number counts the wave, not what stays. On the 5.5 million supported jobs: that study was paid for by the industry's lobbying group and produced by economic modeling, not measurement. The study that measured, county by county, found 100 to 200 jobs and flat wages.⁶ Say: "One of these numbers came out of a model the industry paid for. The other one came out of counting. I will take the counting." If they offer to give up the tax breaks, take the win and make it stick: "Say that on the record. Cap the exemptions." That concession is most of what your side is actually asking for.

The trap question inside this exchange, be ready for it: "If the deal loses money, why do more than thirty states keep making it? They must see an upside you are not counting." Do not dodge it, because there is a real answer, and it has three parts. **One, the 48 cents counts only the state treasury, and the people signing these deals are buying things the treasury number does not count:** the ribbon cutting, the announcement with a tech giant's logo on it, construction jobs they can point to, and property tax that flows to their counties even when the state's own books lose. The benefit is visible and concentrated. The cost is invisible, forgone revenue never shows up as a line item, and fourteen states do not even publish the total.²⁰ **Two, most states never actually decided to spend this much.** The exemptions were written years ago, when data centers were small, with no caps and no annual vote. Then AI arrived and the cost exploded on autopilot: Ohio nearly tripled in a single year, from \$555 million to \$1.6 billion, without any legislature voting to spend \$1.6 billion.²⁰ **Three, it is a bidding war.** Each state matches its neighbors because losing the building feels worse than losing the money, even when the math says otherwise. That is not evidence the deal is good. It is the reason the fix has to be caps and disclosure rather than trusting each state to stop on its own. Say: "They see an upside, sure: an announcement. The audit that came later is the part they were not counting."

On the home values line, size it honestly: the Brookings 2 to 5 percent is the **extra** rise, above what near-identical counties saw, spread across the **first decade** of operation.⁶ On a typical house that is a couple of thousand dollars a year of added price, real but modest. Use it as a footnote to the sharper finding, which is that wages did not rise at all: the building made housing a little more expensive without making paychecks any bigger. Do not lead with it, and do not let it get inflated into "data centers priced out the neighborhood," because the study will not support that.

Point 4. Virginia studied this honestly, and the permanent half of the verdict is bad.

The short version: The state with more data centers than anywhere on earth had its own nonpartisan investigators look. They found real benefits that mostly end when construction ends, and permanent costs that do not end.

What this actually means: Construction work is genuinely good work and there is a lot of it. But it stops. The power demand does not stop. So the real question is whether you are trading a temporary boom for a permanent obligation.

The proof: Virginia's JLARC credited data centers with 74,000 jobs, \$5.5 billion in wages, and \$9.1 billion in economic activity per year, and stated that those benefits come **mostly during initial construction**. It then found their power demand will likely increase costs for all customers, including people with nothing to do with data centers, and that if demand grows unchecked, Virginia's electricity needs would **double within ten years**, with data centers as the main driver. To supply that, the state would have to add new solar power at twice the rate it managed in 2024, and more new wind power than every offshore site it has secured could produce.²²

How big is that, really: Doubling electricity needs in ten years means building, in one decade, a second copy of the generating capacity that it took Virginia the better part of a century to build the first time. And the yardsticks in the study are not abstractions: twice the solar the state managed in its best year ever, every single year, plus more offshore wind than every site Virginia has secured put together. Not impossible. But nobody has ever done it, and if it falls short, the shortfall gets managed with higher prices, which land on everyone.

Say it like this: "Virginia's own legislature looked at this. A construction boom that ends, in exchange for a power bill that does not. That is the trade."

The discipline here: Quote the good half out loud first. Saying "74,000 jobs, and here is the rest of the finding" makes the rest land far harder than hiding it would.

What they will say back: "The same study you are quoting found 74,000 jobs, \$5.5 billion in wages, and \$9.1 billion a year. Do you accept the whole finding or only your half? And construction here is not one event. It is a decade-long rolling pipeline, which is exactly why union hours doubled over ten years instead of spiking once and collapsing."^{7 22}

Your comeback: You already quoted their half first, so the trap does not close on you. Then answer the pipeline: a rolling pipeline is still temporary, it rolls until the buildout stops, and then it stops. What does not stop is the other half of the finding: electricity demand that would double the state's needs within ten years, with data centers as the main driver, and costs that land on every customer.²² Say: "You have described a wave. I am talking about what the wave leaves behind."

Point 5. The water use is real and largely hidden, and the pollution lands on the same neighborhoods it always does.

The short version: Many data centers cool themselves by evaporating clean drinking water, like sweating. That water does not come back. And the power plants built to run them get put next to poor neighborhoods.

What this actually means, on water: Computers get extremely hot. A common way to cool them is to evaporate water, which carries the heat away. That water goes into the air, not back into the local river or aquifer. There is also a second, invisible amount: making the electricity uses water too, at a power plant somewhere else. Companies often report only the water used at the building, which makes the number look far smaller than the real total.

The proof: Researchers led by Shaolei Ren at the University of California, Riverside, published in a leading computer science journal that training one AI model in Microsoft's U.S. facilities could directly evaporate on the order of **700,000 liters** of clean freshwater, and projected global AI water use at 4.2 to 6.6 billion cubic meters by 2027, more than several European countries withdraw in a year.²³ Ren has separately argued that company disclosures mislead precisely by counting only the water at the building.

How big is that, really: 700,000 liters is about 185,000 gallons, roughly what a typical American family runs through in a year and a half, for every faucet, shower, load of laundry, and sprinkler, evaporated to train one model one time. Be honest about the other end of the scale too: any single AI question costs a sip, and your opponent will say so. The argument was never about one glass. It is that the industry is pouring billions of glasses, in specific places, some of which were short on water before it arrived.

What this actually means, on air: Some operators are not waiting for the grid. They install their own gas-burning turbines on site, because it is faster. Turbines emit pollution that causes smog and breathing problems. Where they get placed is the issue.

The proof: In South Memphis, the company xAI put gas turbines next to Boxtown, a mostly Black neighborhood already surrounded by industrial polluters, in a county that **already fails the federal health standard for smog** and that the American Lung Association graded F for ozone. The turbines emit nitrogen oxides and formaldehyde. The Southern Environmental Law Center appealed the air permit on behalf of the local NAACP chapter and a group called Young, Gifted and Green. Hundreds of residents attended the public hearing, and **every single person who spoke opposed it**. The permit was issued anyway. The NAACP later sued over illegal pollution and asked a court for emergency action, and reporting in 2026 documented 59 turbines running without permits at a second site nearby.²⁴

Say it like this: "Hundreds of people showed up. Not one spoke in favor. The permit was issued anyway, in a neighborhood that already fails the federal air standard. That is not a coincidence. That is a pattern."

What they will say back: On water, the direction of travel: "Microsoft cut data center water use roughly 90 percent from its earliest buildings, put back more freshwater than it took in 2025, and its newest designs use no water at all for cooling. Google has committed to the same by 2030."¹⁴ On Memphis: "That is one company at one site behaving badly. It is exactly what siting standards are for." A shrewd opponent will even offer to accept siting restrictions in water-stressed regions, to look reasonable.

Your comeback: On water, name whose numbers those are: the company's own, self-reported, unaudited. The peer-reviewed research exists precisely because company disclosures count only the water used at the building and leave out the water used making the electricity, which makes the total look far smaller than it is.²³ And the newest designs do not retrofit the hundreds of buildings already running. On Memphis, accept their "siting standards" answer and then spring it: standards existed, hundreds of residents spoke, not one in favor, and the permit was issued anyway.²⁴ Ask: "The standard was on paper. It did not bind. Tell me exactly what would have stopped this, and I will ask why the industry is not demanding it."

Point 6. Communities across the country are saying no, and the industry's own tracker proves it.

The short version: Opposition is not a few cranks. It is enormous, it is growing fast, it crosses both parties, and the people counting it work for the AI industry.

What this actually means: This is an argument about consent. The benefits get argued at the state and national level. The costs, meaning the noise, the traffic, the water, the power bill, get experienced by the people who live next to it, and they generally were not asked.

The proof: A tracker called Data Center Watch counts blocked and delayed projects. It is run by a firm whose clients are AI companies, so it has every reason to make opposition look small. **These are their numbers.** \$64 billion in projects blocked or delayed through 2025. Then in the first three months of 2026 alone, about 75 projects worth roughly **\$130 billion**, matching the entire previous year in a single quarter. They describe it as a structural change rather than a blip: communities have learned from each other, opposition groups more than doubled across 49 states, and fourteen state legislatures took up pause proposals in three months.²⁵ In March 2026, Senator Bernie Sanders and Representative Alexandria Ocasio-Cortez introduced a bill for a national pause.²⁶

How big is that, really: A large data center campus runs one to several billion dollars, so \$130 billion in one quarter is on the order of **fifty to a hundred large projects** turned away or stalled in three months, by zoning boards and county meetings, which are the smallest and slowest levers in American government. Be precise about what the dollars measure, though: that is the price tag of investment that did not land, which the pro side counts as the communities' loss, not their savings. So use the number for what it honestly shows: the size and speed of the revolt, not money anyone banked.

And know the denominator, because they will: In the very same record quarter for blocking, the industry also set its all-time record for building: \$44.7 billion of actual construction spending in Q1 2026 alone, with full-year investment forecast near \$700 billion.²⁹ So do not claim communities are winning, they are not, most projects still go through. The claim that survives is different and still strong: market analysts now estimate **30 to 50 percent of the 2026 pipeline is on track to be delayed or canceled**,²⁹ which means local consent has become one of the largest business risks this industry faces. You are not describing a movement that is stopping the buildout. You are describing a movement big enough that the buildout's own analysts now price it in.

Say it like this: "This tracker is funded by a firm that works for AI companies. They have every reason to undercount. And even their numbers say \$130 billion of projects got blocked or stalled in three months."

What they will say back: Full concession, then a reframe: "You are right that opposition is real. Now look at what people actually object to: power bills, water, noise, traffic, property values. Every one of those is a siting and standards problem with a known fix. Opposition to a badly placed project is not opposition to the industry."

Your comeback: Scale breaks that story. One badly placed project is a siting problem. \$130 billion stalled in a single quarter, opposition groups more than doubling across 49 states, and fourteen legislatures moving pause bills in three months is the same set of complaints showing up everywhere the buildings show up.²⁵ If they answer with the denominator, "more got built than blocked, spending set a record that same quarter," concede it straight, because it is true, and then land on the number that survives: analysts put 30 to 50 percent of this year's pipeline on track for delay or cancellation.²⁹ A risk that size is not a few cranks at a zoning meeting, it is a line item. Then take their own fix and hand it back as a demand: "If the fixes are known, why is the industry not writing them into its contracts before anyone forces it? Make them binding. The day they are binding, most of this opposition, including mine, goes quiet."

Point 7. They are enormous, they hum all night, and they change what a place is.

The short version: A data center is a windowless box the size of several football fields, ringed by fences and lights, with hundreds of rooftop fans running around the clock. Put one next to homes and the neighbors do not get a factory's jobs; they get a factory's noise and a factory's silhouette, permanently.

What this actually means: The complaints that fill county meetings are rarely about terawatt-hours. They are about a hum that comes through closed windows, a skyline of gray walls where a farm used to be, and the sense that a town made a decision nobody who lives there was asked about. Those are real harms even though nobody can put them on a utility bill.

The proof, part one, the noise: In the Great Oak neighborhood south of Manassas, Virginia, an Amazon data center went up next to homes. Residents measured up to 65 decibels at night and described it as "like being on a tarmac with an airplane engine running constantly," except that the plane never leaves. One neighbor replaced every window in his house and it did not help.³² After two years of pressure, Amazon replaced all 424 rooftop exhaust tubes with taller ones, cutting the noise by about 10 decibels, roughly half as loud, to around 50 decibels.³³ Then the county wrote a new noise ordinance, 52 decibels in the daytime and 47 at night, about the level of moderate rainfall. Testing showed the Amazon complex still would not comply, that the low-frequency roar residents feel inside their houses is not regulated by the old rule or the new one, and that emergency diesel generators are not covered by either.³⁴ Next door in Loudoun County, the county's own website says noise complaints "are among the most persistent issues brought forward to Loudoun County officials," admits it has no rule at all for

tonal or low-frequency noise, and does not expect one until 2027.³⁵ This is not new. Chandler, Arizona residents began complaining about a million-square-foot data center in 2014 and the city did not adopt an ordinance until 2023.³⁶

The proof, part two, the scale and the setting: The Prince William Digital Gateway was 37 data center buildings, "roughly the equivalent of 144 Walmart Supercenters," with 14 electrical substations, planned on the edge of Manassas National Battlefield Park. County planning staff recommended denial twice, in part because without drawings of the actual buildings nobody could trust the studies of what they would look like from the battlefield. The Virginia Court of Appeals voided the rezoning in March 2026 and the developer dropped its appeal that July.³⁷ In North Carolina, the Forsyth County planning board recommended denying a hyperscale project in Rural Hall in June 2026 after residents argued it would end the area's rural character, and Stokes County residents sued over a zoning change that opened a dozen rural sites to data centers.³⁸

How big is that, really: A decibel scale is logarithmic, so the numbers understate it. The 65 decibels measured at Great Oak is a vacuum cleaner in the next room, all night, every night. Even after Amazon's fix, 50 decibels is a refrigerator that never cycles off. And the buildings do not go away: a data center is a thirty to fifty year land use, so the question is not whether the hum is tolerable this year but whether the next owner of every house nearby gets asked.

Say it like this: "You are describing megawatts. The people who live there are describing a hum they cannot turn off and a wall where their view used to be. Both are real. Only one of them is in your spreadsheet."

Why this is strong: It is the argument that actually wins zoning votes. Power bills and water get argued at the state capitol; noise, lights and character get argued at the microphone in the county boardroom, by people who can point out the window.

What they will say back: "Every one of those complaints has an engineering answer, and the answers are being written into law right now. Amazon cut the noise in half once it was made to. Chandler's ordinance has required a sound study, mitigation and generator testing windows since 2023. Loudoun ended by-right data centers in March 2025 and is writing design and compatibility standards. Prince William is adopting a rainfall-level noise limit. And the one measured study of home values found they went up 2 to 5 percent near data centers, not down."^{33 36 39 6}

Your comeback: Concede the fixes, then point at the dates. Great Oak's neighbors waited two years for a fix that still fails the county's own new standard, Loudoun says it will not have a low-frequency rule until 2027, and Chandler took nine years.^{34 35 36} Every fix arrived after the building did, and the building does not move. Say: "You are right that the standards exist. Now tell me why the industry keeps building before they do." On home values, do not fight the number; narrow it. A county-wide average rising 2 to 5 percent says nothing about the twenty houses on the fence line, which is where the noise lives.⁶

B. Answering the points they will open with

The counters above cover what they say when you attack. This section is for when **they** are on offense with their own affirmative points. Each of their six points in Part 4 ends with a "what they will say back" block. **That block is you.** Those are your lines. Read Part 4 the same way they will read Part 3, and you have both halves of every exchange. Two of their openers deserve special drilling because they come up in nearly every debate:

Their Loudoun County opener (taxes down ten years running): your answer is under their Point 2. The short version: do not fight the numbers, fight the concentration. 39 percent of a county budget on one industry is a household living on one paycheck.

Their "efficiency fixed this before" opener: your answer is under their Point 6. The short version: that research covers 2010 to 2018, the one-time savings of consolidating server closets are spent, and the same authors now publish the projections showing steep growth.^{1 13} You can only empty the closets once.

C. Cross-examination: questions to ask them

1. "Your rate study was paid for, and reviewed before publication, by the industry's lobbying group. Is there an independent study that reached the same conclusion?"⁸
2. "Virginia's protections start in 2027. How much got connected before that date, and under what terms?"⁹
3. "You say data centers will ease off during peak hours. Will you support making that a binding requirement instead of voluntary?"¹¹
4. "The grid's own independent watchdog says data centers drove \$6.3 billion in one auction. Is the watchdog wrong?"¹⁷
5. "If these are as profitable as you say, why do they need a tax exemption that costs Ohio \$1.6 billion a year?"²⁰
6. "What share of a county's budget depending on one industry would you consider too risky? Is 39 percent fine?"⁴

D. Your soft spots

- **Do not say data centers are the main reason electricity prices are rising nationally.** They are not, and you will get fact-checked. Natural gas price swings, old power plants retiring, grid upgrades, wildfire protection, and equipment costs are all major drivers.^{8 10} Say data centers are a large and fast-growing driver. That is true and defensible.
- **Do not dispute the Loudoun County tax numbers.** They come from public budget documents anyone can pull.⁴ Attack the concentration risk and the lack of consent instead.

- **Do not use "\$2 million per job" as a current figure.** It comes from an older analysis of the very biggest deals. Use it as a sense of scale and lead with the state-by-state revenue losses instead.²
- **Your best jobs evidence is your opponent's own study.** Quote it accurately, including the 56 percent rise in tech employment it found, or you will be caught cherry-picking and lose the exchange.²¹
- **Memphis is one company at one site.** Do not claim it is what every operator does. Use it as proof of what happens when nothing constrains siting.²⁴
- **The Virginia study also found large benefits.**²² Say them out loud first. It costs you nothing and makes you credible.
- **On noise and looks, do not claim the buildings are unfixable.** Amazon cut Great Oak's noise in half once made to, and Chandler's rules have worked since 2023.^{33 36} Argue timing and enforcement: the fixes arrive after the building does.
- **Do not argue for a national construction ban.**²⁶ It is the maximum possible ask, it is not going to pass, and defending it makes you easy to dismiss. Argue for the specific tools instead: mandatory flexibility, public contracts, caps on tax breaks, and real siting standards. Those are much harder to argue against.

Part 4. Arguing FOR data centers

A. Your case

Point 1. These buildings get built no matter what. The only question is where.

The short version: Blocking one in your county does not stop it existing. It moves it, along with the tax revenue and the jobs, somewhere else.

What this actually means: The demand for computing comes from customers worldwide, not from your zoning board. Turning down a project does not reduce how much gets built. It reduces how much of it happens under your rules and on your tax rolls.

The proof: The federal government has adopted this position formally. The national AI plan treats this infrastructure as central to both the economy and national security, with more than ninety actions to speed construction.² A companion executive order instructs agencies to exempt qualifying projects from the standard federal environmental review, put them on an accelerated permitting track, and open federal land for them.³

The AI race version of this point, with the mechanics spelled out: How advanced an AI system can be is set by how much computing power trained it, and computing power is not an idea, it is racks of chips in a physical building drawing city-scale electricity. Whoever has more of those buildings trains stronger models faster and can put AI to work across more of its economy and military. Industry trackers estimate the United States holds roughly **75 percent of the world's AI computing capacity, against about 15 percent for China**, and even the pro-buildout advocacy groups frame it starkly: of the four pillars of AI strength, energy, compute, talent, and adoption, compute is the one pillar America still clearly leads.³⁰ U.S. export controls keep the best chips out of China's hands, but a chip only becomes capability once it is installed in a powered building. **The data center is where America's chip advantage gets converted into something usable.** That is why U.S. capacity is forecast to grow from 62 gigawatts in early 2026 to 152 by 2030, and why security analysts argue frontier facilities need to be on U.S. soil rather than built overseas.³⁰

The honest caveat to carry with it: the race framing assumes AI capability keeps scaling with compute, which it has so far, and it concedes the other pillar: China's electric grid is growing far faster than America's, which turns every argument about permitting and power into an argument about the race itself.

Say it like this: "The only thing a county actually controls is whether this gets built inside its borders, under its rules, paying its taxes. Not whether it gets built."

Be careful: This argument can come off as a threat. Frame it as a choice about control, not as take it or lose it.

What they will say back: "That is what gets said in every race to the bottom. It is an argument for a floor of standards, not for having none. And if this infrastructure is as valuable and strategic as you claim, it can afford to be built properly."

Your comeback: Agree with the standards, out loud, immediately. Your argument was never "no rules." It is about who gets to write them: the only rules that will ever apply to this building are the rules of the place that hosts it. A county that says no gets no revenue and writes no rules. Say: "You want it built properly. So do I. The community that hosts it is the only one that gets to define properly. Walking away is how you end up with someone else's definition."

Point 2. The tax money is real, it is already proven, and it is lowering people's bills right now.

The short version: This is not a projection. One Virginia county has cut its property tax rate ten years in a row because data centers pay a huge share of the budget.

What this actually means: A homeowner's property tax bill depends on the total the county needs, divided among everyone who pays. Add an enormous new taxpayer and everyone else's share goes down. That is not theory. It shows up on the bill.

The proof: In Loudoun County, Virginia, data centers produced roughly **\$1.2 billion** in property tax revenue in fiscal year 2026, about 39 percent of the county budget and nearly half of all property tax collected. Over that same decade the county cut its property tax rate **every single year**, from \$1.145 per \$100 of assessed value in 2016 down to \$0.805 in 2026. The average homeowner's bill went down year over year even though home values went up.⁴

Say it like this: "One industry is covering a share of the cost of schools, deputies, and roads that would otherwise land on families. That is not a forecast. That is ten straight years of tax cuts you can look up."

What they will say back: Three attacks, none of them on the numbers. "Loudoun is the single most favorable example on earth, so it proves nothing about anywhere else. Thirty-nine percent of a county budget depending on one industry is not a success story, it is a household living on one paycheck. And Loudoun's own residents are among the loudest opponents in the country, so the tax discount is not even buying consent."²⁵

Your comeback: Concede that Loudoun is the extreme case, then point out you do not need the extreme: a fraction of that revenue still changes what a county can afford. On concentration, that is an argument for managing the ratio, not refusing the taxpayer. Counties manage exactly this with reserve funds and caps, the way a family banks a bonus instead of building a lifestyle on it. On the residents: their complaints are about siting next to neighborhoods, not about the tax rate, and notice that in ten years of public hearings nobody has petitioned to give the money back.

Point 3. The jobs argument, told honestly. And the construction workers are not a footnote.

The short version: Do not claim thousands of permanent jobs. Claim what the research actually found, plus the very large and very real construction workforce.

What this actually means: If you overstate the permanent jobs, you will be corrected using a real study and you will lose the round. So use the study yourself, first, and get credit for honesty. Then pivot to construction, where the numbers are genuinely large and where the people making the argument are unions, not companies.

The proof, permanent jobs: Two Brookings economists compared roughly 1,500 built facilities against 52 projects that were announced and then canceled, which is a clever way to compare similar places instead of comparing boomtowns to nowhere. Counties that got their first major data center saw computing employment rise 56 percent and telecom employment rise 43 percent over a decade, which works out to roughly **100 to 200 permanent jobs**. Home values rose 2 to 5 percent.⁶

The proof, construction: Local 26 of the electricians' union, covering Washington, DC, Maryland, and Virginia, reports its members worked **28 million hours** last year, double what they worked a decade earlier, with data centers accounting for at least half of that, and **600 new apprentices in a single year**. The national construction trades federation has partnered with Microsoft and OpenAI on training programs.⁷

The downstream jobs question, handled honestly, because it will come up: "How many jobs does one data center create beyond its own walls?" There are three layers, and they are not equally solid. **Layer one, inside the building:** 50 to 200 permanent, measured.⁶ **Layer two, the supply chain:** the industry's own economic study, by PwC for the Data Center Coalition, estimates each direct job supports 4.5 more across construction, utilities, logistics, and services, a 5.5x multiplier, putting the industry at 5.5 million supported jobs nationally.³¹ Use it with its label on: industry-funded, produced by economic modeling rather than measurement, counting gross activity rather than net new jobs. The measured county-level result, Brookings, is far smaller, which tells you most of that multiplier lands somewhere other than the host community. **Layer three, the jobs created by the computing itself,** the AI companies, products, and productivity running on it: no honest number exists per building, and you should say so before your opponent does. The compute is national and interchangeable; nobody can attribute a San Francisco startup's payroll to one building in Ohio. So make layer three an analogy instead of a number: **nobody ever measured the electric grid by counting the jobs inside the power plant.** Power plants employ few people too. The last century's economy ran on them anyway. If AI matters, this is its grid, and "how many people work in the building" is the wrong yardstick for a piece of infrastructure.

And know the counter to that analogy, because it is a good one: if the benefit is national and diffuse, the cost is local and concentrated. The host community gets the noise, the water draw, and the power bills, while the downstream jobs land in tech hubs somewhere else. That is not an argument against the grid. It is an argument that the host community deserves to be paid like a host, which loops back to taxes, standards, and binding terms.

Say it like this: "An apprenticeship is a credential that outlasts any one job site. And notice who is making this argument. That is organized labor fighting for its own members, not a company press release."

What they will say back: Your own study, used against you. "One hundred to two hundred permanent jobs, next to Ohio giving up \$1.6 billion in one year. The same study found wages did not rise at all, and home prices up an extra 2 to 5 percent over the decade is a cost for renters and first-time buyers. And Brookings found the subsidies flow to the wrong buildings: only 2 percent of investment in the big company-owned facilities, but 62 percent in the low-job rental ones."^{6 20 21}

Your comeback: Give them the subsidy and keep the building: "Cap the exemptions. Kill them if you want. I will support that." Their own evidence says the big facilities barely need the subsidy, which means the industry stands on its own without it.²¹ You just took their best argument off the table at no cost to yours. Then return to what nobody disputes: 28 million union hours, 600 apprentices in a single year, credentials that outlast any one site.⁷ The jobs argument they are attacking is not the one you made.

Point 4. The cost-sharing problem is real, it has a known fix, and the fix is being installed.

The short version: Whether a big customer pays its own way is a question of how the referee writes the rules. Those rules are being rewritten right now, fast.

What this actually means: Back to the group dinner. If splitting the check evenly is unfair, you do not cancel dinner. You change how the check gets split. Regulators do this by creating a separate customer group for gigantic users, with its own rules, so their costs stay with them.

The proof, part one: An analysis by the consulting firm E3 found no measurable evidence to date that other customers have been subsidizing data centers, found some studies where large customers actually paid more than they cost and pushed other people's rates down, and counted **at least 38 new rules for giant customers created between 2018 and 2026, thirty of them in just 2025 and 2026.**⁸ It also noted that the states with the fastest growing demand, Texas and Virginia, had among the **smallest** price increases, while California and New York had the largest price increases with demand falling.⁸

The proof, part two: Virginia is the concrete case. In November 2025 the state regulator created a separate customer class for anyone using more than 25 megawatts. They must sign **fourteen year contracts** and pay for at least 85 percent of the wires capacity and 60 percent of the generating capacity they reserved, **whether they use it or not**, starting January 1, 2027.⁹

Say it like this: "You reserved the table for fourteen years, you pay for the table, even if you never show up and even if the building never gets finished. That is what Virginia just required."

Disclose this yourself: The E3 study was paid for by the industry's trade group. Say so before your opponent does. Then add that E3 is the same firm Virginia's legislature hired for its own independent study, and that E3 openly wrote that the risk "is not absent."

What they will say back: "Your study was bought by the industry's lobbying group and reviewed before release, and even it admits the evidence is thin and the risk is not absent. Virginia's fix does not start until January 1, 2027, years into the buildout. Creating a fix is an admission the problem was real. And consumer groups say the regulator ducked the hardest question, who pays for the transmission lines."⁸
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Your comeback: You already disclosed the funding, so that punch lands on air. Add that E3 is the same firm the Virginia legislature independently hired for its own study. On "admission": of course the problem was real, that is how all regulation works, rules follow problems. What matters is speed, and thirty of the 38 new rules landed in just the last two years.⁸ Then flip the transmission question into an offer: "Name the rule you want added and I will support it. If no rule would satisfy you, then rules were never your objection."

Point 5. The grid has far more room than people think, if the load will bend.

The short version: We are not asking the grid to grow into this. We are asking data centers to step back during the handful of hours a year when the grid is strained.

What this actually means: The highway built for the worst traffic jam of the year is empty most of the time. A customer who agrees to stay off the road during rush hour can use all that empty capacity the rest of the year, and nobody has to build new lanes. New lanes are what costs everyone money.

The proof: Researchers at Duke University found that roughly **100 gigawatts** of new demand, an enormous amount, could be added across the grid regions serving about 95 percent of the country **using the equipment already in the ground**, as long as those customers accept short, occasional cutbacks.¹¹ This is not just a paper anymore. A utility research institute is running live tests at nine sites across the U.S. and Europe with 49 participants, including Google, Meta, Microsoft, Oracle, NVIDIA, utilities, and grid operators.¹²

Say it like this: "We are not asking anyone to build a bigger grid. We are asking one customer to sit out a few hours a year, and in exchange we get room for a hundred gigawatts."

Your vulnerability, know it now: today this is voluntary. If they challenge you to make it mandatory, **say yes**. Defending voluntary is a losing position and conceding costs you nothing.

What they will say back: "Your hundred gigawatts only exists if data centers actually ease off at peak hours, and today that is voluntary. Most contracts do not require it. A promise to maybe step back is not grid capacity."¹¹

Your comeback: One word first: "Yes." Then: "Make it mandatory. A binding condition of connecting to the grid. I will say it before you finish asking." Defending the voluntary status quo is the only way to lose this exchange, and conceding turns their attack into a shared policy you both now support. Then show it is already moving from paper to practice: live tests at nine sites across the U.S. and Europe with 49 participants, including Google, Meta, Microsoft, and the grid operators themselves.¹²

Point 6. This industry has actually gotten more efficient before, and the scary forecasts have been wrong before.

The short version: Ten years ago experts predicted data center energy use would double, triple, or quadruple. It did not. It stayed roughly flat while the amount of computing exploded.

What this actually means: Efficiency improvements, plus moving computers out of thousands of wasteful small server rooms into a few well-designed giant ones, kept energy use nearly flat for years. Worth remembering that the confident alarming forecast has a track record here, and the track record is bad.

The proof: A peer-reviewed paper in the journal *Science* showed that widely repeated predictions of data center energy doubling or quadrupling were simply wrong, because efficiency gains held global use near one percent of world electricity while computing output grew enormously.¹³ On water, Microsoft reports it put back more freshwater than it took in during 2025, five years ahead of its own target, cut data center water use roughly **90 percent** compared to its earliest buildings, and designs its newest facilities to use **no water at all** for cooling in normal operation. Google has committed to

the same water goal by 2030.¹⁴ And on the buildout itself, an analyst at ITIF notes that announced projects consistently overstate what gets built: deals fell more than 40 percent in late 2025, and only about a third of announced projects are actually under construction.¹⁵

Say it like this: "The technology that was evaporating water to cool itself is being replaced by closed-loop systems that use none. The problem they are describing is one the industry is already engineering out."

Be careful, this is your weakest point: the *Science* paper covers roughly 2010 to 2018, and those savings are largely spent. Use it as a reason for humility about forecasts, never as a claim that energy use is not rising now. It is rising, and the same authors are the ones documenting it.

What they will say back: "That paper covers 2010 to 2018. The savings came from moving computers out of thousands of wasteful server closets into a few efficient giant buildings, and you can only do that once. It has been done. And the same authors now publish the federal projections showing use climbing from 192 TWh toward 578 to 782 by 2030."^{1 13}

Your comeback: Concede the dates before they say them, and use the history for exactly one thing: humility about confident scary forecasts, because the last one was wrong for a reason. Engineers were working the problem, and they still are. Then move to the present tense, where you have fresher evidence: announced projects wildly overstate what gets built, deals fell more than 40 percent in late 2025, only about a third of announcements are actually under construction¹⁵, and the newest cooling designs use no water at all in normal operation.¹⁴ Say: "The forecast assumes the industry stands still. It has never once stood still."

Point 7. The noise and the looks are real complaints with engineering answers, and the answers are being written into law.

The short version: A data center is a quiet neighbor compared with almost any other industrial use. Where it has been a loud one, the fix was fans and setbacks, not a ban, and communities that wrote real standards got results.

What this actually means: Do not wave away noise and appearance. They are the complaints that fill the room, and dismissing them is how a project loses a vote it should have won. Instead, treat them as the siting problems they are. A building with a few dozen employees generates almost no traffic, no smoke stacks, no shift changes and no trucks. What it generates is fan noise and a big flat wall, and both have known remedies.

The proof, part one, the fix works: The worst-known case is Great Oak, next to an Amazon data center south of Manassas, Virginia, where residents measured up to 65 decibels at night.³² Amazon replaced all 424 rooftop exhaust tubes with taller ones so the air vented upward instead of toward the homes, and the noise fell by about 10 decibels, half as loud, to around 50 decibels by both the residents' and the company's measurements.³³ That is what a mitigation requirement produces when it is enforced.

The proof, part two, the rules are arriving: Chandler, Arizona has required, since January 2023, a pre-construction sound study shared with residents, mitigation so operating noise does not exceed the baseline, limits on when backup generators can be tested, neighborhood meetings and an on-site liaison.³⁶ Loudoun County, which hosts more data centers than anywhere on earth, ended by-right data center approvals on March 18, 2025, so every new one now needs a special exception with conditions, and in September 2025 it began writing use-specific standards covering compatibility, aesthetics and infrastructure.³⁹ Prince William County has proposed a noise limit of 52 decibels by day and 47 at night, about the sound of moderate rainfall.³⁴

The proof, part three, the property values: The one careful study of counties that got a data center found home values rose 2 to 5 percent more than in near-identical counties over the following decade.⁶ Whatever the buildings do to a view, the market did not price them as a blight.

Say it like this: "Nobody should have to live next to a hum. That is a design standard, and the counties writing them are getting quieter buildings. It is not a reason to send the tax base to the next county over."

What they will say back: "Every fix you name came after the building did. Great Oak waited two years and still fails the county's new limit, the low-frequency roar is not covered by any rule, and the generators are exempt. Loudoun says it will not have a low-frequency standard until 2027. Chandler took nine years. And a county-wide home value average says nothing about the houses on the fence line."^{34 35 36}

Your comeback: Agree that late is the problem, then make it the offer: "Write Chandler's rules into the approval before the first shovel: a baseline sound study, a mitigation guarantee, setbacks, screening, generator testing windows. I will support every one of them." A developer who accepts those conditions has answered the complaint; a county that rejects the project anyway was never arguing about noise. On the fence line, do not argue the average, argue the remedy: setbacks and berms are exactly what special exception conditions are for, and Loudoun's move to conditional approvals makes them enforceable.³⁹

B. Answering the points they will open with

When they are on offense with their own six points, your answers are already written: each of their points in Part 3 ends with a "what they will say back" block, and **that block is you**. Those are your lines, sourced and ready. Read Part 3 the way they will read Part 4 and you have the whole exchange from both sides. Two of their openers to drill, because they open with them constantly:

Their Harvard opener (ratepayers are subsidizing Big Tech): your answer is under their Point 1. The short version: it is a serious legal argument, not a measurement, and the study that measured found none.^{8 16} Then concede the secrecy immediately and support public contracts. It costs nothing and takes away their applause line.

Their watchdog opener (\$6.3 billion in one auction): your answer is under their Point 2. The short version: the dinner distinction, delivered slowly. Who caused the cost is not disputed. How the check gets split is what the 38 new rules and Virginia's customer class govern.^{8 9} Never dispute the number itself.

C. Cross-examination: questions to ask them

1. "You cite Virginia's study. That study found 74,000 jobs and \$9.1 billion a year. Do you accept the whole finding or only the half you quoted?"²²
2. "You say regular customers are subsidizing data centers. Name the study that measured it. Harvard read filings and made a process argument. Which study put a number on it?"^{16 8}
3. "Texas and Virginia had the biggest demand growth and among the smallest price increases. California and New York had the biggest price increases with demand falling. What is your explanation?"⁸
4. "If every tax exemption were eliminated tomorrow, would you support these projects? If not, the tax break was never really your objection."
5. "Your own opposition tracker is funded by a firm that works for AI companies. You trust their numbers. Why not their framing?"²⁵

D. Your soft spots

- **Never claim large permanent employment.** The honest ceiling is roughly 100 to 200 jobs per county.⁶ Overclaim and you lose the whole round on credibility.
- **Do not dispute the \$6.3 billion figure.** It comes from the independent market watchdog, not from activists.¹⁷ Reframe it using the dinner distinction. Denying it makes you look like you are hiding something.
- **Your best cost study was paid for by the industry's lobbying group and reviewed by them before release.**⁸ Disclose it first, every time. Then note that E3 is the same firm Virginia's legislature hired independently, and that E3 itself wrote that the risk "is not absent."
- **Your flexibility argument is conditional and you should concede that immediately.**¹¹ Most contracts do not require it today. Offer to make it mandatory rather than defending the status quo.
- **Virginia's protections do not start until January 1, 2027.**⁹ Concede the delay. Arguing otherwise is a losing fact fight.
- **The efficiency paper is about 2010 to 2018.**¹³ Those gains were largely spent before AI arrived, and its own authors now publish the projections showing steep growth.¹ Use it for forecasting humility only.
- **Do not dismiss noise as a nuisance complaint.** Great Oak measured 65 decibels at night, the fix took two years, and the low-frequency hum is still not regulated.^{32 34} Offer the standards before you are asked.

- **Do not dismiss the Memphis case.**²⁴ Hundreds of residents spoke and not one supported it, in a place already failing federal air standards. The right answer is that this is exactly what siting standards are for, not that it did not happen.

Part 5. The four points where the sides genuinely collide

Most of this debate is two sides answering different questions. These four are real disagreements, and a serious exchange should end up here.

1. **Did families actually pay more?** One study finds no measurable subsidy in what customers were billed. The grid watchdog finds billions in costs caused by data center demand.^{8 17} These are not flatly contradictory, because who caused a cost and who got billed for it are different questions. Whether that difference ever reaches a family's bill is genuinely unresolved.
2. **Is flexibility real or just promised?** The 100 gigawatts of room depends on data centers easing off during peak hours.¹¹ Live tests are running at nine sites.¹² Most contracts signed today do not require it.¹¹
3. **Do construction benefits count?** Both major studies find the benefits concentrated in the building phase.^{6 22} Construction unions think that is the whole point.⁷ Opponents think that is the whole problem.
4. **Who eats the loss if a project fails?** Contracts requiring minimum payment push that risk onto the data center.⁹ Whether those terms become standard everywhere, and whether they survive the first big bankruptcy, nobody knows yet.

Notes

Numbers are stable source identifiers used throughout this handbook. Full Chicago note form.

Who these sources are, and who paid them

Listed alphabetically, in Chicago bibliography form. For each one: who they are, whether you can trust them, and what your opponent will say about them. Know this before you cite anybody.

AI Data Center Index. "United States vs China AI Data Centers (2026)." Accessed September 16, 2026. <https://aidatacenterindex.com/compare/united-states-vs-china/>. And American Edge Project. "China Is Coming for America's AI Edge." Accessed September 16, 2026. <https://americanedgeproject.org/china-is-coming-for-americas-ai-edge-heres-how-we-fight-back/>.

The index is a tracking site that tallies known AI data center facilities and capacity by country; treat its exact figures as estimates of a fast-moving target, though the rough shape, America holding on the order of three quarters of the world's AI compute against China's roughly 15 percent, is consistent with academic and government estimates. The American Edge Project is a technology industry advocacy group, openly pro-buildout and funded by tech companies, cited here for its own framing of the race: of the four pillars of AI strength, compute is the one America still clearly leads. **That framing cuts both ways and both sides should notice:** it is the pro side's strongest reason to build, and it is also an admission that everything rests on one pillar.

American Battlefield Trust. "Victory at Manassas! Prince William Digital Gateway Project Dead After Developer Drops Appeal." July 2, 2026. <https://www.battlefields.org/news/victory-manassas-prince-william-digital-gateway-project-dead-after-developer-drops-appeal>.

A nonprofit founded in 1987 that buys and preserves Civil War and Revolutionary War battlefield land, funded by members, donors and land-preservation grants. It was a party to the fight against the Digital Gateway, so its account is an advocate's victory announcement. **The checkable facts are the project size, the court dates and the withdrawal of the appeal;** the characterization of the project as destructive is the Trust's own. Pro side: note that the court voided the rezoning over how the county ran its hearings, not over what the buildings would look like.

Bahar, Dany, and Greg Wright. "New Evidence on Data Center Employment Effects." Brookings Institution. Accessed September 12, 2026. <https://www.brookings.edu/articles/new-evidence-on-data-center-employment-effects/>.

Two economists. Dany Bahar teaches international and public affairs at Brown University and is also a fellow at the Brookings Institution, a long-established research organization in Washington. Greg Wright teaches economics at the University of California, Merced. Neither one specializes in data centers, and that is exactly why this study is trusted: they applied ordinary economics to the question without a stake in the answer. Their clever move was comparing counties that got a data center against counties where one was announced and then canceled, which compares similar places rather than comparing boomtowns to nowhere. **Use in debate: this is the one study both sides can honestly cite.** It limits what the pro side can claim about jobs, and it hands the anti side its best evidence that the tax breaks are aimed at the wrong buildings.

Cardinal News. "A State Study Found That Data Center Tax Break Was Virginia's 2nd Best Incentive." June 19, 2026. <https://cardinalnews.org/2026/06/19/a-state-study-found-that-data-center-tax-break-was-virginias-2nd-best-incentive-producing-6-1-of-labor-income-for-every-1-in-exemptions/>.

A nonprofit, nonpartisan newsroom covering Southwest and Southside Virginia, reader and foundation funded. Cited for its report on a 2026 state incentive evaluation finding the data center exemption produced \$6.10 of labor income per exempted dollar, the strongest pro-side framing of Virginia's tax math. **Both sides should hold this next to the 48-cents-on-the-dollar state revenue finding:**²² labor income measures wages generated in the economy, mostly during construction; the 48 cents measures what actually came back to the state treasury. Different questions, both honest, and whichever side quotes only its favorite is cherry-picking.

City of Chandler, Arizona. "Chandler's Data Center Ordinance Now in Effect." January 11, 2023. <https://www.chandleraz.gov/news-center/chandlers-data-center-ordinance-now-effect>.

A city government describing its own ordinance (No. 5033, effective January 5, 2023), so the provisions are authoritative and the framing is self-congratulatory. Chandler is the longest-running data center noise dispute in the country, with complaints dating to 2014. **Both sides use it:** the pro side as proof that a workable rulebook exists, the anti side as proof of how long a city can take to write one.

Data Center Coalition. "Reports and Publications." Accessed September 12, 2026. <https://www.datacentercoalition.org/reports-and-publications>.

The data center industry's trade association and lobbying arm. Its president, Josh Levi, has led it since 2019, after nearly twenty years at a Northern Virginia technology trade group where he ran policy and founded its political fundraising committee. He testifies regularly before Congress and federal energy regulators. **This is advocacy, full stop.** Its large national figures for jobs and economic contribution come from studies it paid an accounting firm to produce, and they use a counting method that includes every downstream effect, which inflates the total compared to the careful studies. If you use these numbers, expect to defend the method. You are better off leading with Loudoun County, where the figures are public records.

Data Center Knowledge. "Amazon Tones Down Data Center Noise After Residents Sound the Alarm." October 24, 2023. <https://www.datacenterknowledge.com/data-center-construction/amazon-tones-down-its-data-center-noise-after-residents-sound-the-alarm>.

A trade publication for the data center industry, advertiser-funded and generally sympathetic to the business it covers. Cited for the mitigation facts at Great Oak: 424 exhaust tubes replaced and a roughly 10 decibel reduction, confirmed by both residents' and Amazon's measurements. **That dual confirmation is what makes the number safe to quote from either podium.**

Data Center Watch. Q1 2026 Report. 10a Labs, 2026. <https://www.datacenterwatch.org/q1-2026>.

A project that tracks community opposition to data centers, run by a firm called 10a Labs whose stated clients are AI companies and large technology firms. It does not disclose who funds this specific research. **Use in debate: the funding is the argument.** A firm that works for AI companies has

every reason to make opposition look small, so when their own count shows \$130 billion in projects stopped in three months, the pro side cannot easily wave it away. Anti side, say the funding out loud before anyone asks.

Earthjustice. "NAACP Asks Court for Emergency Action to Stop Illegal Air Pollution from xAI's Data Center Power Plant." Press release, 2026. <https://earthjustice.org/press/2026/naACP-asks-court-for-emergency-action-to-stop-illegal-air-pollution-from-xais-data-center-power-plant>.

The largest nonprofit environmental law firm in the country, founded in 1971. It only ever represents the side doing the suing. So this is a legal filing by one party in an active case, not a neutral finding. Cite it for what is formally being alleged and what relief is being requested. Do not cite it as though a court had already ruled.

Electric Power Research Institute. *DCFlex: Data Center Flexible Load Initiative*. Palo Alto, CA: EPRI, 2024. <https://www.epri.com/research/products/000000003002031004>.

A nonprofit research institute founded in 1972 and funded mainly by electric utilities. It is regarded across the energy industry as technically solid and deliberately cautious. DCFlex is the live experiment testing whether data centers will actually reduce power use on command. Note that its 49 participants include the very companies being tested, so treat it as a serious joint engineering effort among interested parties rather than an independent audit. Its value is that it moved this question from theory to real measurements at real sites.

Energy and Environmental Economics, Inc. *Understanding the Drivers of Rising Electricity Rates and the Role of Data Centers*. San Francisco: E3, May 2026. https://www.ethree.com/wp-content/uploads/2026/05/Understanding-the-Drivers-of-Rising-Electricity-Rates-and-the-Role-of-Data-Centers_E3-2026.pdf.

An energy consulting firm founded in 1989, hired across the industry by utilities, state regulators, government agencies, and environmental nonprofits alike. **Disclosure printed in the report itself: it was paid for by the Data Center Coalition, the industry's lobbying group, which reviewed it before publication.** E3 states the conclusions are its own. Two things keep it usable anyway: E3 is the same firm Virginia's legislature independently hired for its own study, and this report openly lists its own limits, admitting that only a few studies exist, that most show correlation rather than cause, and that the risk "is not absent." **Pro side: disclose the funding before you are asked. Anti side: quote the limitations rather than attacking the firm. It is far more effective.**

Gaster, Robin. "Four Reasons New AI Data Centers Won't Overwhelm the Electricity Grid." Information Technology and Innovation Foundation, April 7, 2026. <https://itif.org/publications/2026/04/07/four-reasons-new-ai-data-centers-wont-overwhelm-the-electricity-grid/>.

An analyst at a Washington think tank that advocates for technology-friendly policy and is supported in part by technology companies. Its starting position is pro-buildout and it does not hide that. Most useful for one specific thing: its hard numbers showing that announced projects consistently overstate what actually gets built.

Good Jobs First. *Cloudy Data, Costly Deals: How Poorly States Disclose Data Center Subsidies*. Washington, DC: Good Jobs First, November 2025. <https://goodjobsfirst.org/wp-content/uploads/2025/11/Cloudy-Data-Costly-Deals-How-Poorly-States-Disclose-Data-Center-Subsidies.pdf>.

Tarczynska, Kasia. "Data Center Subsidies Surge as States Lose Billions." Good Jobs First, 2026. <https://goodjobsfirst.org/data-center-subsidies-surge-as-states-lose-billions/>.

A nonprofit founded in 1998 that tracks tax breaks given to corporations. It is openly opposed to corporate subsidies and has been for decades, across both parties and every industry, not just this one. Kasia Tarczynska is its senior researcher and the author of its data center work. **Its methodological strength is the thing to say out loud when challenged: the revenue-loss numbers come from the states' own legally required financial disclosures, not from this group's estimates. These are the governments' own books.** Its limitation is that it counts money given away without fully counting money later collected.

Google. "Operating Sustainably." Google Data Centers. Accessed September 12, 2026. <https://datacenters.google/operating-sustainably/>.

A company reporting on itself, with a direct financial interest in how it looks. Included because the industry's environmental commitments are part of its argument and deserve to be quoted accurately from the source. Treat the specific figures as self-reported and unaudited. Note that the water research cited above is aimed directly at reports like this one, for counting only the water used at the building.

Industrial Info Resources. "Actual, Planned Capital Investments in U.S. Data Centers Soar." 2026. <https://www.industrialinfo.com/news/article/actual-planned-capital-investments-in-us-data-centers-soar--357253>.

A commercial market intelligence firm that tracks industrial construction projects and sells the data to builders, suppliers, and investors. It has no side in this debate; its customers just need accurate counts of what is actually being built. Cited for the denominator on the opposition point: record actual construction spending of \$44.7 billion in Q1 2026 and a full-year 2026 investment forecast near \$700 billion, alongside the market analysis putting 30 to 50 percent of the 2026 pipeline at risk of delay or cancellation. **Both sides need this source:** the pro side to show the buildout is not being stopped, the anti side to show the risk is now large enough that the industry's own trackers price it in.

Holland & Knight. "Loudoun County, Virginia, Eliminates By-Right Data Center Development." April 2025. <https://www.hklaw.com/en/insights/publications/2025/04/loudoun-county-virginia-eliminates-by-right-data-center-development>.

A large law firm's client alert, written for developers who need to know what changed. Neutral on the merits, precise on the mechanics: after March 18, 2025, data centers in Loudoun's industrial districts need a special exception rather than being allowed by right. Use it for the rule, not for any view of whether the rule is good.

Inside Climate News. "In Northern Virginia, a Coming Data Center Boom Sounds a Community Alarm." February 10, 2023. <https://insideclimatenews.org/news/10022023/virginia-data-centers-amazon-prince-william-county/>.

A nonprofit, foundation-funded newsroom that covers climate and energy and has won a Pulitzer Prize. Its sympathies run toward communities and the environment, and this piece is built on resident interviews at Great Oak. **The quotes are the residents' own words; the decibel readings are the residents' measurements**, later matched by the company's after mitigation. Pro side: do not dispute the experience, dispute what follows from it.

Joint Legislative Audit and Review Commission. *Data Centers in Virginia*. Report 598. Richmond: JLARC, December 9, 2024. <https://jlarc.virginia.gov/pdfs/reports/Rpt598-2.pdf>.

Virginia's nonpartisan investigative agency, created in 1973, staffed by career analysts and overseen by legislators from both parties. Its studies are ordered by law and it has no position to defend. For this one it hired the University of Virginia for the economic analysis and E3 for the electricity modeling. **This is the most authoritative document in the whole debate and the first one you should reach for no matter which side you are on.** It studies the place with more data centers than anywhere on earth, and it genuinely supports both cases. Always quote both halves before using your half.

Li, Pengfei, Jianyi Yang, Mohammad A. Islam, and Shaolei Ren. "Making AI Less 'Thirsty': Uncovering and Addressing the Secret Water Footprint of AI Models." *Communications of the ACM* (2025). Preprint arXiv:2304.03271. <https://arxiv.org/abs/2304.03271>.

Shaolei Ren is a professor of electrical and computer engineering at the University of California, Riverside, who studies the environmental cost of computing and was appointed to a United Nations panel on the subject. Mohammad Islam teaches computer science at the University of Texas at Arlington. The other two authors were researchers in Ren's lab. This is peer-reviewed academic work in a major computing journal, and it is the paper that put AI water use into the public conversation. **Know its limit before somebody shows it to you:** the estimates rely on efficiency figures the companies themselves report and on regional averages, so there is real uncertainty in the numbers, which the authors say plainly.

Loudoun County, Virginia. "Data Centers: The Loudoun Story." Accessed September 12, 2026. <https://www.loudoun.gov/6408/Data-Centers-The-Loudoun-Story>.

Official communications from the county that has benefited from data center taxes more than anywhere else on earth, published partly to defend a policy that is locally controversial. The tax rate history and revenue figures are public budget documents and are not seriously disputed by anyone. The framing around them is a government advertising its own decisions. **Anti side: do not attack the numbers, you will lose. Attack how unusual Loudoun is, and how risky it is to depend on one industry for 39 percent of a budget.**

Loudoun County, Virginia. "Data Centers: Noise & Air Quality Concerns." Accessed September 16, 2026. <https://www.loudoun.gov/6405/Noise-Air-Quality-Concerns>. And "Data Center Standards & Locations." Accessed September 16, 2026. <https://www.loudoun.gov/5990/Data-Center-Standards-Locations>.

The same county government that publishes the Loudoun tax story, here describing its own rules and their gaps: a 55 dBA limit at residential property lines, no rule for tonal or low-frequency noise, amendments not expected until 2027, by-right approvals ended March 18, 2025, and a Phase 2 standards project approved September 16, 2025 that names aesthetics and compatibility among its subjects. **A government admitting a gap on its own website is about as reliable as a source gets;** both sides can quote it without a fight over credibility.

Martin, Eliza, and Ari Peskoe. *Extracting Profits from the Public: How Utility Ratepayers Are Paying for Big Tech's Power*. Cambridge, MA: Environmental and Energy Law Program, Harvard Law School, March 2025. <https://eelp.law.harvard.edu/wp-content/uploads/2025/03/Harvard-ELI-Extracting-Profits-from-the-Public.pdf>.

Ari Peskoe runs the electricity law program at Harvard Law School and is one of the most cited experts in the country on how electricity is regulated. Regulators, utilities, and advocates all rely on his work, which makes him hard to dismiss. Eliza Martin was a legal fellow there. Their evidence is a review of nearly fifty real regulatory cases, so the claims rest on the official record rather than on a computer model. **This paper is the foundation of nearly every consumer protection argument now being made to state regulators.** Pro side: the correct response is that it is an argument about process and fairness rather than a measurement of dollars, and then to agree with them about the secrecy.

Masanet, Eric, Arman Shehabi, Nuo Lei, Sarah Smith, and Jonathan Koomey. "Recalibrating Global Data Center Energy-Use Estimates." *Science* 367, no. 6481 (February 28, 2020): 984-986. <https://doi.org/10.1126/science.aba3758>.

Published in *Science*, one of the two most prestigious research journals in the world. Eric Masanet is a professor at the University of California, Santa Barbara. Jonathan Koomey is an independent analyst who spent two decades correcting exaggerated forecasts about computers and energy. Arman Shehabi and Sarah Smith are federal lab scientists who also produce the official U.S. estimates today. **State the caveat yourself before your opponent does: this covers roughly 2010 to 2018, those efficiency gains have largely been spent, and these same authors now publish the projections showing steep growth.** Use it as a reason to be humble about scary forecasts, not as a claim that energy use is flat today.

New Jersey Board of Public Utilities. "NJBPB Announces Conclusion of New Jersey's Annual Electricity Supply Auction." News release, February 12, 2025. <https://www.nj.gov/bpu/newsroom/2024/approved/20250212.html>.

New Jersey's state utility regulator, announcing the results of its own annual auction that sets what households pay for electricity supply. This is the referee publishing its own scoreboard, so the percentage increases are authoritative for New Jersey. Used here for one purpose: turning the wholesale capacity price spike into what actually happened to a home's bill. Note that New Jersey was among the hardest-hit states, so treat its 17 to 20 percent as the high end, with PJM's own 1.5 to 5 percent estimate as the low end.

Norris, Tyler H., Tim Profeta, Dalia Patino-Echeverri, and Adam Cowie-Haskell. *Rethinking Load Growth: Assessing the Potential for Integration of Large Flexible Loads in US Power Systems*. Durham, NC: Nicholas Institute for Energy, Environment and Sustainability, Duke University, February 2025. <https://nicholasinstitute.duke.edu/publications/rethinking-load-growth>.

Tyler Norris is a Duke University researcher who previously developed solar projects and advised the U.S. Department of Energy, and he testified on this study before a congressional committee in March 2025. Tim Profeta founded the Duke institute and ran it for almost twenty years, after working as a Senate staffer on climate legislation. Dalia Patino-Echeverri is a Duke professor of energy systems. **University research, not paid for by industry, and the most downloaded thing this institute has published in twenty years.** Its headline number depends entirely on data centers agreeing to cut back at peak times, which most contracts do not currently require. That is where the anti side will push, and it is a fair push.

Office of Senator Bernie Sanders. "Sanders, Ocasio-Cortez Announce AI Data Center Moratorium Act." News release, March 25, 2026. <https://www.sanders.senate.gov/press-releases/news-sanders-ocasio-cortez-announce-ai-data-center-moratorium-act/>.

Bernie Sanders is the independent senator from Vermont. Alexandria Ocasio-Cortez represents part of New York City in the House. This is a political announcement, cited for what the most restrictive position formally asks for. The bill is not expected to pass. **Anti side: do not adopt this as your position, it makes you easy to dismiss. Pro side: getting your opponent to defend a total national ban is a very good trap.**

O'Leary, Sean. "Why Data Centers Will Be Economic Development Duds." Ohio River Valley Institute. Accessed September 12, 2026. <https://ohiorivervalleyinstitute.org/why-data-centers-will-be-economic-development-duds/>.

Sean O'Leary is a senior researcher at the Ohio River Valley Institute, a progressive research group founded in 2020 focused on Appalachian Ohio, Pennsylvania, and West Virginia. It does not claim to be neutral. What gives it real weight is a decade of documented work on the natural gas boom, where it

showed counties posting excellent economic statistics while actually losing jobs and residents. **That track record is the argument, and it is a comparison rather than a direct measurement of data centers.** Expect that challenge, and answer it with the Brookings jobs figure.

Prince William Times. "Coming Crackdown on Data Center Noise Likely Won't Bring Relief to a Community Most Affected." March 6, 2025. And "Some Cities Suffering from Data Center Noise Turn to Tough Limits." February 2023. And "County's Planning Staff Recommends Denial of the Massive Digital Gateway Data Center Development, Again." December 2023.

A local weekly newspaper in Prince William County, Virginia, the county with the second-largest data center concentration in the world, which has covered the noise and zoning fights there continuously since 2022. Local, reader-funded and close to the story. **Its value is specificity:** the proposed 52 and 47 decibel limits, the finding that the Amazon complex would still fail them, the exemption for generators, and the planning staff's objection that viewshed studies could not be trusted without building drawings.

PwC. *Economic Contributions of Data Centers in the United States 2017-2023*. Prepared for the Data Center Coalition, 2025. https://static1.squarespace.com/static/63a4849eab1c756a1d3e97b1/t/67b38f78e9cf125daf756112/1739820925392/Data+Center+Economic+Contribution+Study+2025_Final.pdf.

PwC is one of the world's largest accounting and consulting firms; this study was commissioned by the Data Center Coalition, the industry's lobbying group. It is the source of the 5.5 million supported jobs figure and the claim that each direct job supports 4.5 more. The method is input-output modeling (IMPLAN), which estimates ripple effects through supply chains and household spending rather than counting actual jobs, and it reports gross activity, not net new jobs. **Pro side: quote it with the funding and the method disclosed, or it will be done for you. Anti side: do not call it fake, call it a model, and put the measured Brookings numbers next to it.** Modeled versus measured is the entire fight over this source.

Smith, Sarah J., Alex Hubbard, Alex Newkirk, Mohan Ganeshalingam, Billie Holecek, Dale Sartor, Michael Mills, and Arman Shehabi. *United States Data Center Energy Usage Report: 2025 Update*. LBNL-2001758. Berkeley, CA: Lawrence Berkeley National Laboratory, June 2026. <https://doi.org/10.71468/P1RP4F>.

Lawrence Berkeley National Laboratory is a federal research lab run for the U.S. Department of Energy by the University of California. The lead scientists have produced the government's official data center energy estimates for over a decade. Peer reviewed, federally funded, using purchased industry market data. **This is the neutral scorekeeper and the safest number to quote on either side.** One caution: the 2030 estimate is a range from 578 to 782 TWh, and the authors give a range precisely because a single confident number would not be honest. Do not quote the middle figure as a prediction.

Southern Environmental Law Center. "Inside Memphis' Fight Against xAI." Accessed September 12, 2026. <https://www.selc.org/news/inside-memphis-fight-against-xai/>.

A nonprofit public interest law firm founded in 1986, working across six southeastern states, and the lawyers representing the Memphis NAACP chapter in the air permit fight. They are a party to an active dispute, so their characterizations argue one side. **The underlying facts are independently checkable and that is how to cite them:** what the permit allows, how many turbines there are, that the county already fails the federal smog standard, and the American Lung Association's 2025 grade.

United States. Executive Office of the President. "Accelerating Federal Permitting of Data Center Infrastructure." Executive Order, July 23, 2025. <https://www.whitehouse.gov/presidential-actions/2025/07/accelerating-federal-permitting-of-data-center-infrastructure/>.

The White House. *Winning the Race: America's AI Action Plan*. Washington, DC: The White House, July 2025. <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf>.

Official federal policy documents issued by the Trump administration on July 23, 2025. Cite them as authoritative statements of what current U.S. policy is, not as research. Their economic assumptions are contested. **Anti side: the provision worth targeting is the one exempting these projects from standard federal environmental review, because that review is the step where local objections would normally get heard.**

Virginia State Corporation Commission. *SCC Data Center Initiatives: Ensuring Data Centers Pay Their Own Costs*. Richmond: SCC, February 2026. <https://www.scc.virginia.gov/media/sccviriniagov-home/about-the-scc/fact-sheets/scc-data-center-initiatives-02-2026.pdf>.

Virginia's utility regulator, three commissioners elected by the state legislature, with judge-like authority over what the power company may charge. This is the referee describing its own ruling, so the contract terms are authoritative while the framing is self-congratulatory. **Note the split reading, because it is usable from either podium:** industry says the November 2025 order proves big customers now pay their own way, while consumer and land conservation groups argued the commission ducked the harder question of who pays for the transmission lines.

Southern Environmental Law Center. "Community Groups, Residents File Lawsuit Over Stokes County Data Center Rezoning." Press release, 2026. <https://www.selc.org/press-release/community-groups-residents-file-lawsuit-over-stokes-county-data-center-rezoning/>. And WFDD. "Planning Board Recommends Denying Rezoning for Proposed Rural Hall Data Center." June 11, 2026. <https://www.wfdd.org/politics-government/2026-06-11/planning-board-recommends-denying-rezoning-for-proposed-rural-hall-data-center>.

SELC is described above; here it represents the plaintiffs, so this is one side's filing. WFDD is the NPR member station in Winston-Salem, North Carolina, publicly and listener funded, reporting a planning board vote. **Cite the vote and the lawsuit as events, and the "rural character" objection as what residents argued, not as a finding.**

Utility Dive. "Data Centers Drove \$6.3B in PJM Capacity Auction Costs: Market Monitor." 2026. <https://www.utilitydive.com/news/pjm-data-centers-capacity-auction-imm-bowring/825626/>.

An industry news publication reporting the findings of Monitoring Analytics, the independent watchdog for the PJM grid, led since 1999 by Joseph Bowring. **This is the credibility point to make out loud:** the watchdog is not an advocacy group and not part of the grid operator's management. It is the official referee, created to check whether the market is being run fairly, and it reports to federal regulators. Bowring has publicly criticized the grid operator's own market design as well as data center demand, so this is not a one-sided source. The news article is the accessible version; the original is the watchdog's own market reports.

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1. Sarah J. Smith, Alex Hubbard, Alex Newkirk, Mohan Ganeshalingam, Billie Holecek, Dale Sartor, Michael Mills, and Arman Shehabi, *United States Data Center Energy Usage Report: 2025 Update*, LBNL-2001758 (Berkeley, CA: Lawrence Berkeley National Laboratory, June 2026), <https://doi.org/10.71468/P1RP4F>.
 2. The White House, *Winning the Race: America's AI Action Plan* (Washington, DC: The White House, July 2025), <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf>.
 3. "Accelerating Federal Permitting of Data Center Infrastructure," Executive Order, July 23, 2025, <https://www.whitehouse.gov/presidential-actions/2025/07/accelerating-federal-permitting-of-data-center-infrastructure/>.
 4. Loudoun County, Virginia, "Data Centers: The Loudoun Story," accessed September 12, 2026, <https://www.loudoun.gov/6408/Data-Centers-The-Loudoun-Story>; and "Hemstreet Presents \$4.7B FY 2026 Budget with 'Unprecedented' Data Center Revenues," *Loudoun Now*, February 2025, https://www.loudounnow.com/news/hemstreet-presents-4-7b-fy-2026-budget-with-unprecedented-data-center-revenues/article_82f9c6ba-e9db-11ef-a684-ab75573cc019.html.
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