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June 30, 2025

North Dakota Public Service Commission Hearing
Grand Williston Hotel & Conference Center
3601 2nd Ave W
Williston, ND 58801

Re: Basin Electric Power Cooperative, Bison Generation Station – Williams County, Siting Application – Case No. PU-25-86

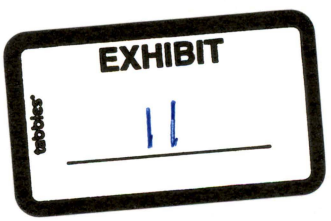
Dear Commissioners Sheri Haugen-Hoffart, Randy Christmann, and Jill Kringstad,

I am here to offer my support of the construction of Basin's Bison generation station, seeking siting approval today in Wheelock township in Williams County, North Dakota, which would provide 1,490 MW of needed firm generation capacity to our region.

Upper Missouri G. & T. Electric Cooperative, Inc. d/b/a Upper Missouri Power Cooperative is a transmission cooperative based in Sidney, Montana, offering wholesale electricity from Basin Electric and the Western Area Power Administration to its eleven Class C member cooperatives in western North Dakota and eastern Montana. There are five cooperatives in North Dakota and six in Montana. Upper Missouri is Basin Electric's largest and continued fastest growing Class A member system, most of which has been driven by gas and oil production, its associated pipelines and ancillary services across the Bakken.

The approval and completion of the Bison generation station is necessary to meet the ten-year load forecasts of its members, as well as meeting new requirements by the Southwest Power Pool for a greater reserve capacity, called planning reserve margins, to uphold our firm power requirements when the wind isn't blowing and strengthen our total system reliability.

The Bison generation station will serve the organic growth of its membership, much due to the load growth in western North Dakota. Upper Missouri does expect new growth in data and technology, however, it is important to note that large technology, data, or industrial loads will not be served by Bison and instead be addressed in a new Large Load program with their own resources paid for by those Large Load companies and not paid by the existing rate payers.



We work with Basin to carefully and continuously plan and assess our power requirement needs. It is important that infrastructure additions and improvements are made to meet the demands of growth, and to maintain continued reliability to the residents, ranchers, and all the industry already developed in our region. The addition of this generation is important to protect the electric reliability of our region and will help us meet the needs of North Dakota for decades to come.

Upper Missouri strongly supports the development and construction of the Bison generation station.

Sincerely,

Jeremy Mahowald
General Manager
Upper Missouri Power Cooperative
111 2nd Ave SW
Sidney, MT 59270

Testimony concerning the Bison Generation Station
Delivered to the North Dakota Public Service Commission
June 30, 2025-Grand Williston Hotel, Williston, ND

Good morning, commissioners. Thank you for the opportunity to speak.

My name is Bill Patrie. I am a member of Dakota Resource Council and have been a member of Capital Electric Cooperative for 33 years. I was the economic development director for the State of North Dakota when Basin Electric bought the Dakota Gas Company. I worked 16 years as the rural development director for the North Dakota Association of Rural Electric Cooperatives. I am now retired.

I will address Issue 2 by focusing on efficient use of resources, and Issue 3, I will focus on ensuring continuing system reliability and integrity.

Issue 2 asks if the proposed facility is compatible with environmental preservation and the efficient use of resources. Using natural gas as a fuel source for generating electricity is more environmentally friendly than mining and burning coal. However, the principle secondary uses of that electricity include drilling for and pumping crude oil to be refined for motor fuel. Another major planned use of that electricity is to power computers for data and crypto currency mining centers. Those facilities create artificial intelligence and non-fungible tokens used as a form of currency. Both the burning of motor fuel in cars and trucks and the use of natural gas in generating electricity contribute to global warming. There are other ways of powering motor vehicles and the producing electricity that do not contribute as much to global warming. Preserving a livable climate requires and honest consideration of those alternatives. A more efficient use of electricity is to use less of it, and as a consequence reduce the demand, cost, and resources to produce it. Crypto Currency mining creates a product that is an alternative to legal currency when it has not been demonstrated that such an alternative is needed. I am not certain using natural gas to provide power for crypto currency mining is an efficient use of resources.

Issue 3 asks if the facility will be ensuring reliability and integrity and that energy needs are met and fulfilled. Again, this question needs to look through to the end use of electricity. The business model Basin has used since its inception has been large, cost-efficient generating plants. Basin is the 21st largest cooperative in the United States generating $2.9 billion in sales in 2024. However, this model of large centralized plants also contributes to a grid susceptible to black outs like the one that occurred in Texas in 2021. In 2021 Capital Electric in Bismarck was taken off line from its own substation by the Western Area Power Administration for 45 minutes to transfer power from North Dakota to Texas. I understand that the reverse could also be true, that Texas could send power to North Dakota in the event we had generation failure. However, if Atlas Power Data Center reaches its expected demand of 700 megawatts, it will use as much

power, by itself, as the 20,000 members of Capital Electric. That increased demand does threaten to reduce power available for sharing on the grid. I understand the power to supply Atlas Power Data Center will not come from this proposed plant, but others like it will. Not just Basin Electric is facing this dilemma. Rainbow Energy is considering dedicating 350 Megawatts to a data center park near its Coal Creek Station. That will pull that amount of electricity off the grid previously available to Great River Energy's members in Minnesota. Great River has already signaled their interested in reducing purchases from the plant they used to own and procuring power from more environmentally friendly sources. As an antidote to this problem, I think companies such as Atlas Power Data Center should use power from standalone plants built to serve them, rather than force regulated generators who supply the public grid to build new facilities. As I am sure the Commission is aware, and was reported in the June 12th Bismarck Tribune, "West Virgina law makers approved a bill to create "Micro-grid" districts free from local zoning and electric rate regulation where data centers can procure power from standalone power plants". That same article noted that Utah and Oklahoma are also considering legislation that would make it easier for data center developers to procure their own power supply without going through the grid. If North Dakota followed suit and current and proposed data centers could procure power from standalone power plants built to serve them, it would significantly reduce the demand for electricity generated by Basin and other generators. It could also make available surplus power available from those facilities to be sold to the grid, potentially increasing reliability during high demand peaks. I understand generation cooperatives compete for load with investor-owned firms. Every generator and distribution cooperative wants large, consistent loads that pay their bills on time, it really improves cash flow. However not everything that glitters is ~~not~~ gold. The massive debt load for this new plant will remain whether the load continues or goes away.

If data centers and cryptocurrency mining centers cannot purchase power from standalone plants and are hooked up to the grid, at the least they should be required to pay their proportional share of the construction costs of this Bison plant. If they don't, existing rural electric members like me and all rural electric members, will face increases in our monthly bills to pay for borrowing costs to build a plant for large users without a track record of sustainability. If these extraordinary large loads don't pay their share of construction costs, current electric cooperative members are exposed to a financial risk to their cooperatives. They could face increased monthly rates for electricity from their generation, transmission, and distribution cooperatives without any benefit to either themselves or their cooperative. Thank you again for this opportunity to speak.

North Dakota Native Vote
919 S 7th Street
Suite 603
Bismarck, ND 58504

June 30, 2025

North Dakota Public Service Commission
600 E Boulevard Ave, Dept. 408
Bismarck, ND 58505-0480

RE: Hearing on Certificate of Site Compatibility Application — Bison Generation Station (PU-25-086)

Testimony of Jody DeLong, North Dakota Native Vote Chairman

I am here to express my concern regarding Basin Electric Power Cooperative's application for a Certificate of Site Compatibility for the proposed Bison Generation Station. Reviewing the application, it is clear that the scale, cost, and projected beneficiaries of this $3.8 billion project raise serious questions about whether the people of North Dakota will benefit from this massive infrastructure expansion.

Basin has yet to provide a transparent financial risk assessment to co-op members, which raises red flags about how this project aligns with its duty to protect member interests. So, it seems that Basin Electric's member-owners will be forced to subsidize this $4 billion gamble through increased electric rates. Making this plant is an extraordinarily expensive gamble for all North Dakotans. At $2.7 million per megawatt, it costs nearly three times more than similar gas plants built in Illinois, Ohio, and Pennsylvania within the last decade. There is no clear explanation of how this $3.8 billion investment will impact local ratepayers or provide long-term benefits such as reduced energy costs or enhanced energy security.

This proposal also comes at a time when communities are already feeling the strain from data centers in North Dakota. In 2023, data centers consumed 15.5% of North Dakota's electricity. Their growth is fueling utilities' decisions to delay coal plant retirements and build new gas infrastructure, all while clean energy solutions and efficiency programs are underutilized. According to a recent analysis from the REAMP Network, this unchecked load growth is already reversing climate solution progress and driving higher rates for households.

The proposed 1,490-megawatt plant is enormous by any local standard. To put this into perspective, 1 MegaWatt can power approximately 750 to 1,000 homes, meaning this facility could supply electricity to over a million homes, nearly twice the population of the entire state. It would represent over 50% of North Dakota's total peak electricity demand and is larger than any coal plant currently operating in the state. This size alone suggests that the project is not primarily intended to meet local residential or cooperative member needs.

North Dakota Native Vote
919 S 7th Street
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According to the application, the primary justification for the plant is projected load growth largely driven by assumptions that industrial sectors such as data centers, cryptocurrency mining, carbon capture, and liquid fuels production. These private ventures are repeatedly cited as key drivers of demand, yet the application offers no concrete evidence such as signed contracts, interconnection agreements, or site commitments to substantiate these claims. Basin Electric's own testimony refers only to "interest" from these sectors, not actual commitments. There is no clear detailed load data for local communities, including Williams County and the Mountrail-Williams Electric Cooperative, or other Cooperatives in North Dakota, which would demonstrate an urgent or unmet energy need among residents or agricultural users.

Coincidentally, Basin Electric's leadership has shown a troubling pattern of failed investments and poor transparency. This lack of transparency extends to the economic and public benefit aspects of the project. Basin Electric has confirmed that this project is a factor in its first rate increase since 2016. It is then reasonable to assume that this project is primarily structured to serve large private industrial consumers, with limited assurances of meaningful community advantages.

Another major concern is the environmental and public health risks that have been watered down by assurances of following current regulations which are questionable. The facility will include two large anhydrous ammonia tanks, diesel and chemical storage, which will invoke federal compliance requirements, a sizable wastewater evaporation pond, and increased industrial traffic during construction. Use of these hazardous chemicals underline the importance of approving this project without demonstrable and enforceable compliance to the environment and public health of local communities.

The proposed Bison Generation Station's layout consists of two combustion turbine generators, two heat recovery steam generators, and two steam turbine generators, further raising serious environmental and community risks. Despite higher efficiency compared to simple-cycle plants, this large combined-cycle facility will still emit significant greenhouse gases (CO_2). The combustion turbines and steam cycle also produce nitrogen oxides (NOx), which can further degrade local air quality and increase respiratory illnesses among nearby residents. The large-scale operation will require substantial water use for steam generation and cooling, placing additional stress on local water supplies while creating competitive water use with the fracking industry in this region. This should also raise more concerns about the discharge of heated and potentially contaminated wastewater into the environment.

Given these matters, I ask that the Public Service Commission withhold or delay issuing the Certificate of Site Compatibility until Basin Electric can provide:

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Bismarck, ND 58504

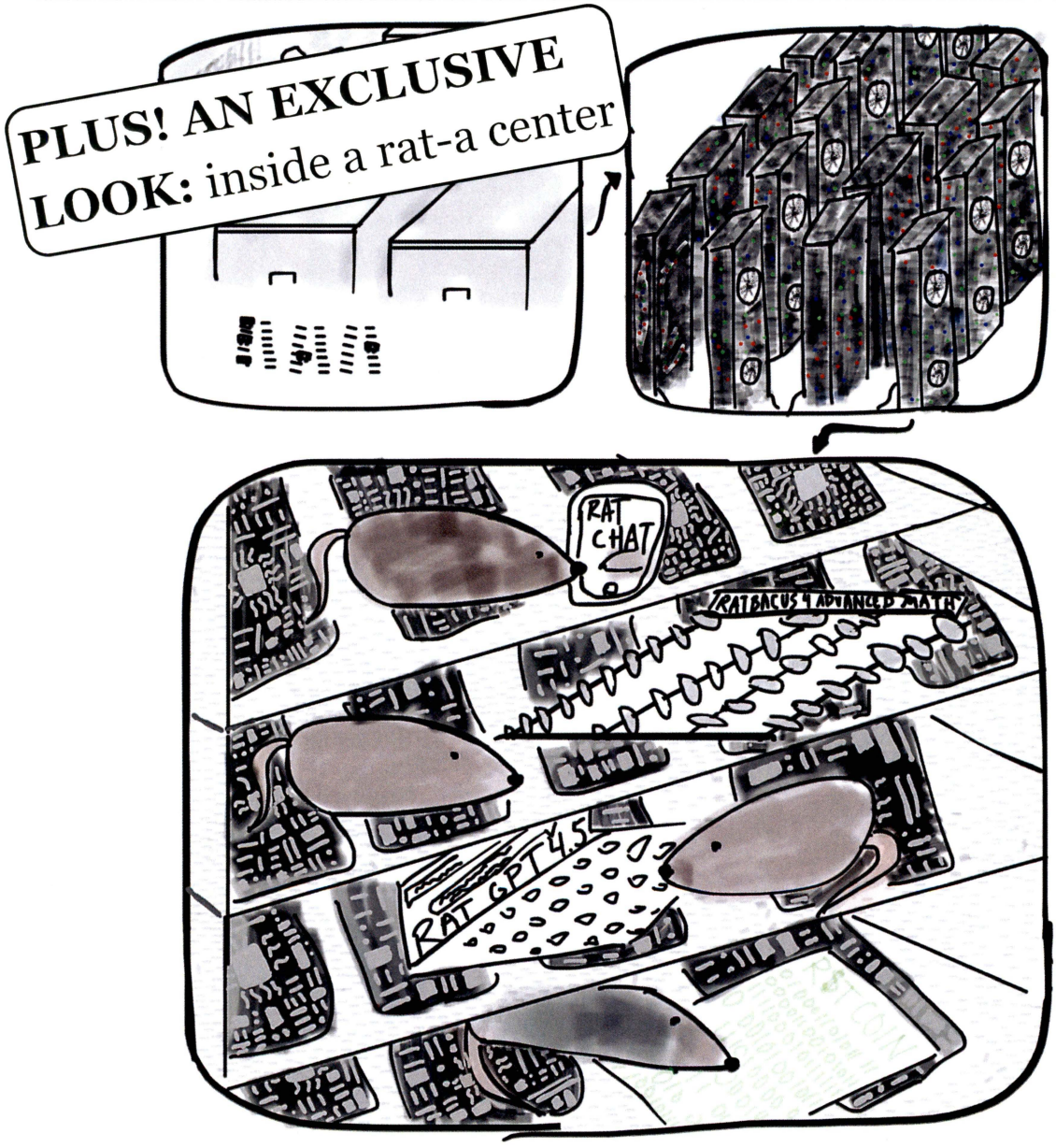
- Clear, local community-level load data demonstrating immediate and unavoidable energy needs;
- Verified contracts or commitments from emerging industrial consumers that reveal the true intentions of upscaling energy loads.
- Transparent analysis showing how the project benefits cooperative members and local residents, not just Private Emerging Sectors.
- Enforceable guarantees prioritizing public health, environmental safety, and energy access.

It seems that this project is not being built to meet the needs of North Dakotans. It is a pork barrel project that will be an overbuilt and unjustifiable project that risks burdening the public with environmental harm and financial costs to subsidize private industry growth. Designed to serve speculative and out-of-state owned data centers and cryptocurrency mining operations, industries known for massive electricity and water consumption, noise pollution, and offering very few permanent, quality jobs to local residents.

The driving force behind this plant is not based on community need. It is not clearly demonstrated how this investment makes financial sense for member-owners. And they certainly haven't asked us if we're willing to foot the bill for a corporate dream of turning North Dakota into a data center playground. This is a dangerous precedent. If you approve this project, you are opening the door to more billion-dollar facilities serving outside interests at our expense, leaving member-owners holding the bag while executives and tech investors cash in.

Thank you for your consideration of these critical issues. Please include this letter in the official public comment docket for the Bison Generation Station application.

DATA CENTERS
In the Midwest and Beyond

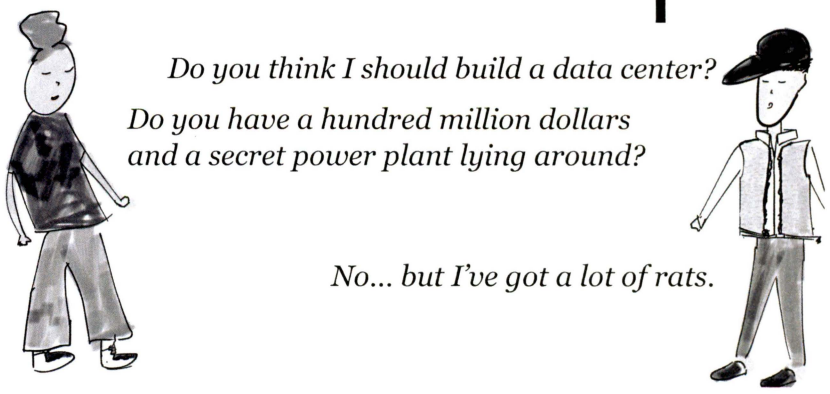


warning: rats for illustrative purposes only. proof of concept rendering. like a data center, but with rats. inside you will find information on data centers, and also some more rats. a non-illustrated and larger print version can be found here.

RE-AMP Quarterly Analysis
Quarter 1, 2025

Written and illustrated by Ruthie Davis

TABLE OF CONTENTS



Introduction

Data centers **consume** a whole lot of electricity and water, and they are growing rapidly. This growth is **catalyzing major changes** in our energy system, among **other impacts**. The data center landscape is ever-changing; this report covers the fundamentals and a snapshot of what's going on in the Midwest as of May 2025.

Key Takeaways

- There are at least 335 operating data centers in the RE-AMP footprint. According to an analysis by the Electric Power Research Institute, **data centers represented as much as 15.5% of North Dakota's electricity consumption in 2023, 11.4% of Iowa's, and 5.5% of Illinois's.**
- Large (hyperscale) operational data centers in our region, such as Meta's or Google's, already use upwards of a billion gallons of water, and a thousand gigawatt-hours (GWh) of electricity from the grid each year. An average home uses around 10 MWh of electricity a year, meaning that operating hyperscale data centers use 100,000 homes worth of energy.
- Data centers in our region are growing – both in number and in size. Most operating data centers in our region are small (under 10 MW, meaning ~8,500 MWh/year), and only around five are over 200 MW. **Nearly 40 new data center proposals in our states are larger than 200 MW**; the largest proposal is from Cloverleaf in Port Washington, WI who are planning up to 3.5GW by 2030.
- This trend is taking place all over, but many hotspots are in RE-AMP states: Ohio, Indiana, Illinois, Wisconsin, Iowa, Minneapolis and Kansas City are all growing rapidly.
- Utilities are building to meet projected increases to their peak load. While most planned resource additions in our region are still wind, solar, and storage, if data center and utility construction proceeds as planned, it will set back progress towards equitably eliminating greenhouse gasses. We identified at least **9 coal plants whose retirements have been impacted by data centers and at least an additional 6.5GW of gas generation planned to come online in the next 5 years** in response to growing demand. Utilities are likely overestimating near-term demand and underutilizing renewables, grid flexibility, and energy efficiency, and that could end up costing consumers as well as the environment.
- Data centers may hold both risks and promise for local communities. Key considerations include water impacts, energy costs, energy reliability, pollution from power plants, noise pollution, questions around AI and new technologies, property values, local land use and sprawl, tax revenue, new infrastructure, and jobs.
- There is some local support for data center growth, but we are increasingly seeing local residents in the Midwest oppose data center proposals in their communities.

Background

A data center is a large building (about the size of a large Target), or multiple large buildings close together. The buildings are full of cabinets of computer servers. They typically require stable power and significant backup power. Since the servers heat up as they operate, these data centers are equipped with powerful cooling systems.

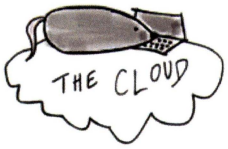
What are they used for?

Loosely, there are three major uses:

- **"The Cloud"** is a catch-all for remote data storage and processing. Instead of storing a copy locally on the computer in front of you, Cloud functions send a copy to a data center elsewhere. Combined, Amazon Web Services (AWS), Microsoft and Google control a staggering 68% of all global cloud market-share, meaning that most companies contract their data storage and processing out are contracting with one of those three companies (see figure 1 for operational data centers in the US broken down by company).[1]
- **Artificial Intelligence (AI)** is an umbrella term used for a wide set of technologies. But much of the reason that we're seeing an explosion of AI and data centers now is the advent of general purpose, consumer-facing generative AI models. These "GenAI" tools (like ChatGPT, Meta's Llama, Google's Gemini, xAI's Grok, etc.) are trained on huge models to process language and produce language (or images), making them exponentially more energy intensive to run than previous models.[2] According to estimates, a ChatGPT query could require 10x more energy than a standard Google search, and a Google search with built-in generative AI would use even more.[3]
- **Cryptocurrency** is a decentralized, digitally-encoded form of currency. Since cryptocurrencies require so many calculations to run, they end up being very energy intensive, although some methods are much more energy-intensive than others. Globally, as of Feb. 2025, Bitcoin is estimated to consume 18.3 GW of electrical power demand – the equivalent of 10 large coal plants.[4] There are several cryptocurrency data centers (called "cryptomines") operational in our region, including at least three in North Dakota.

Why do data centers matter?

Different groups will prioritize different considerations when addressing data centers. Climate organizations are particularly concerned about data centers because of how they are projected to drive energy demand (called "load growth"), how much uncertainty there is around that growth, and how that projected growth may increase emissions. Other considerations include data centers' water and material consumption; impacts to the cost of electricity; the power sector's water consumption and air pollution; and local quality of life. Local quality of life may include downsides such as noise pollution, aesthetic concerns, sprawl into agricultural lands, and impacts on local infrastructure, and potential benefits from data centers' ability to generate tax revenue (after the tax breaks most states give data centers), pay for new infrastructure, and generate some new jobs. At a societal level,



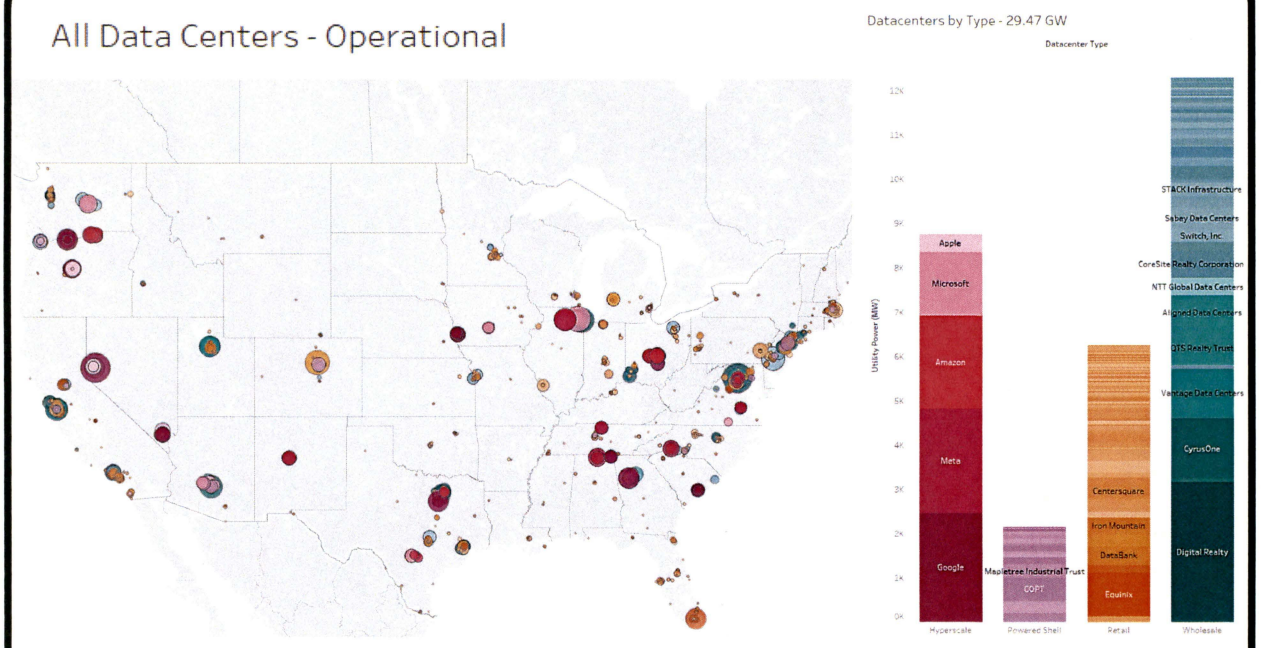
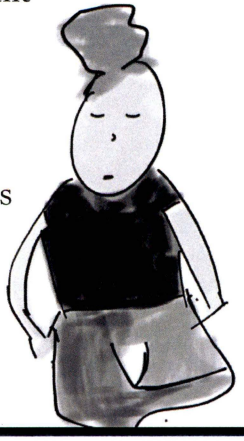


Figure 1: Operational Data Centers in the United States by Type, courtesy of the Sierra Club as of Q4 2024. From 451 Research, part of S&P Global Market Intelligence, "Datacenter KnowledgeBase." Data centers are color-coded by owners. Represents full facility utilization for known, currently operational data centers, excluding cryptomines.

weighing data center expansion

reasons people support new data centers

- expanding the tax base and potential to fund infrastructure
- large customers for real estate, construction and energy
- promise of job creation
- productive use of vacant industrial sites
- developing good relationships with tech companies
- property value impacts
- the expansion of new technologies like AI



concerns people have with new data centers

- electricity demand necessitating new power generation or increased use of existing polluting power plants
- greater risk of blackouts
- higher electricity bills
- water demand exacerbating water scarcity
- contaminated water discharge and e-waste
- noise pollution
- potentially fewer jobs, less tax revenue or lower local investment than promised
- loss of farmland, wetlands, small business or residential areas
- property value impacts
- the expansion of new technologies like AI

questions around the ethics, necessity, profitability, and true promise of AI and crypto hover over data center growth.

But to come back for a moment to load growth on the electric grid: climate folks have been anticipating load growth for a while, mostly from electrifying transportation and industry, and have been advocating for a just transition that implements solutions like efficiency, demand response, and distributed resources while building out renewables to address energy load growth. While many of the long-term solutions to load growth are unchanged, data centers are unique because they are growing much more rapidly than previous projections, and demanding so much power on such a short time frame, that **if construction proceeds according to current plans, data centers *will* set back progress towards equitably eliminating greenhouse gasses.**

So, how much are they projected to grow?

One commonly cited analysis by McKinsey estimated that the amount of energy that data centers in the United States currently draw would double from 2023 and 2030.[5] Another analysis calls McKinsey's estimates "laughably bad," and anticipates much more growth.[6] The best regarded estimate comes from the Lawrence Berkeley National Lab's "Data Center Energy Usage Report," which provides a historical estimate, a review of other projections, as well as its own projection: data centers' energy usage will grow from 176 TWh in 2023 to anywhere between 325 and 580 TWh by 2028.[7] Since data centers only make up a portion of total energy demand (currently 4-5% nationally), double the data centers doesn't mean energy demand as a whole will double – although in hotspots like Central Ohio, the utilities project it will.[8]

Are those projections right?

Although it's clear there are a lot of data centers under construction, there's a lot of uncertainty, and the projections can't all be right. The lack of available data, both historical data and on proposals going forward, and the volatility of the technology itself, which is seeing a bubble of investment,[9] make it hard for even the best estimates to be certain what will happen. Decision makers need to know what to plan for, but they also have some power over which possible future becomes reality.

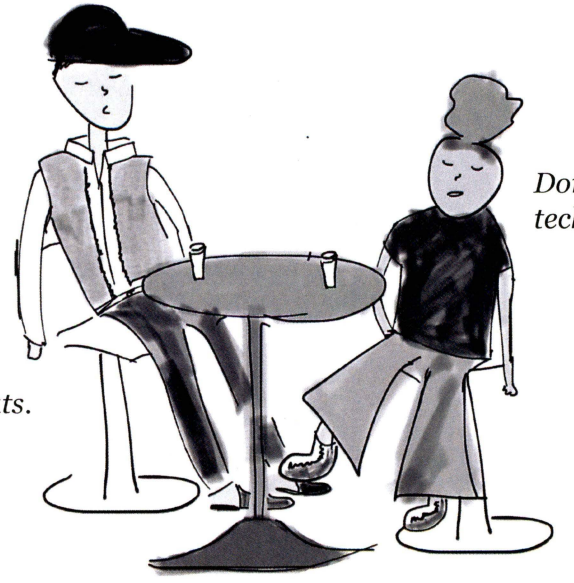
Who has power over the future of data centers?

- **Tech companies and data center owners:** these companies build data centers, and most often have direct control over size, siting, energy source, cooling technology, etc.
- **Investors and shareholders:** these groups have some control over what projects get funded, and leverage over the general direction companies take.
- **Utilities and Public Utility Commissions:** utilities are responsible for calculating how much electricity their region needs, what technologies to use, and then building and delivering it. Investor-owned utilities (IOUs), which serve a

Who has power over the future (part 2):

- **Utilities and Public Utility Commissions (cont.):** majority of customers, are regulated by the Public Utility Commissions, who determine what rates they can charge and often what they can build. Cooperative utilities are run by boards elected by the member-owners they serve, and municipal utilities are run by municipal governments.
- **Regional Transmission Organizations (RTOs) and the Federal Energy Regulatory Commission (FERC):** RTOs are responsible for managing and balancing the grid - so in most cases they're the ones responsible for planning and calculating how much generation the region needs, getting new resources connected to the grid, controlling what generation runs when, building large scale transmission, and more. They are regulated by FERC, which can set rules for the RTOs like recent orders on interconnection and long term transmission planning.
- **Legislators and Local Councils or Boards:** legislators have the ability to control regulatory structures, require clean energy, pass data center-specific legislation (whether incentive or discouragement), etc. Local councils often have decision-making power over approving specific data center sites and zoning.
- **Media:** In deciding what to report and how to report it, the media can impact investment decisions, legislation, local favorability or opposition, etc.
- **Stakeholders including unions, industrial groups, environmental and consumer advocates:** frequently intervene in utility decisions and legislation. They can also be an organizing force for public opinion, or engage with the tech sector directly.
- **Individuals and consumers:** local voices can impact local decisions, and hold companies accountable. When caught in a bubble of growth, consumer trends and attitudes broadly could also impact investment and tech companies' decisions.

It's like, we know there are all these problems, but what's anyone supposed to do about it?



Don't you invest in the tech sector?

No, but I've got a lot of rats.

What's data centers' climate impact?

Data centers are now being directly linked to new gas plants and are postponing retirement of coal plants.[10] At the same time, many tech companies, especially the large ones, have climate and clean energy goals.[11] But some companies, like Amazon, claim they've already reached their net-zero carbon goal.[12] So it's useful to understand how data centers' emissions are calculated.

I'll walk through Meta's 2024 Sustainability Report[13] as an example:

- **Scope 1 Emissions**: These refer to any greenhouse gases generated directly **onsite**, through **operations**. In the case of data centers, these would mostly result from fugitive emissions from gases used as refrigerants for cooling, or diesel use for backup generators. Diesel is notoriously polluting, with considerable health impacts in addition to its climate impacts,[14] and backup generators, which must be large enough to power the whole data center in case of emergency, are typically permitted to run up to 100 hours a year, although if there are no significant blackouts they may run less than that.[15] Meta claims .012 million metric tonnes (MMT) of CO2e of onsite emissions from their data centers globally. Since Scope 1 emissions are the most straightforward to account for, the calculations behind this category are relatively uncontroversial.
- **Scope 2 Emissions**: This category is an estimate of the greenhouse gases generated **offsite** to make the **electricity** that the data center consumes. It's subject to some of the trickiest calculations. Meta presents a "market-based" figure of near-zero (0.0007 MMT). That's because, although they admit to getting more than 99% of their energy from local grids, which are often not that clean, they buy Renewable Energy Credits (RECs) from renewable developers in order to claim that they're "matching" the dirty electricity they're using with clean. But a substantial fraction of these RECs double-count clean energy when the clean energy they "match" with is either in a different place, available on the grid at a different time, or already being sent to the grid for existing load.[16] Meta does present a "location-based" figure based on estimates of the carbon intensity of the local grids – a figure that not all the big tech companies even deign to give.[17] That "location-based" figure was 5.036 MMT in 2023. Just from their 3 sites within RE-AMP, the location-based Scope 2 emissions amount to 0.957 MMT, which is somewhere in the ballpark of 0.065% of total emissions in RE-AMP states.
- **Scope 3 Emissions**: These are sometimes called "embedded" or "embodied" emissions, and it's the estimate of greenhouse gas emissions generated **offsite** to make anything the data center **purchases**. The biggest sources of Scope 3 emissions for data centers are construction materials and computer hardware. In 2023 Meta reported 7.445 MMT of Scope 3 emissions from all of their operations (data centers and otherwise). Microsoft, meanwhile, reported an increase of 30.9% in their Scope 3 emissions, "primarily from the construction of more data centers and the associated embodied carbon in building materials, as well as hardware components such as semiconductors, servers, and racks."[18] Understanding data centers' supply chains are also critical for impacts that go beyond greenhouse gas emissions. Data centers may be tied through their supply chains with global issues of rare mineral mining,[19] as well as issues of indigenous rights and mineral

mining,[20] semiconductor manufacturing,[21] steel production,[22] and concrete production[23] in the Midwest. Supply chain information is often kept confidential,[24] and companies themselves often do not have full visibility.[25] A 2020 survey showed that a majority of data center managers replace their servers at least every 4 years,[26] so that's a lot of ongoing Scope 3 emissions, mineral extraction, and potential e-waste.[27]

Can't data centers just power themselves with renewable energy?

Yes, probably, if they were sufficiently motivated.

In general, data centers can either develop power **onsite**, or connect to the electricity grid to receive **offsite** power. Almost all data centers already do both, to different degrees. For backup power, data centers mostly use onsite diesel generators. But for day to day operations, data centers prefer to receive their power through the power grid.

Building data centers that will draw primarily from **onsite** power (often called co-location, microgrid, energy park, behind-the-meter) is gaining ground because it can be quicker to build than waiting on generation to connect to the grid.[28] Some data centers are being developed that would co-locate with nuclear,[29] or build new natural gas turbines onsite.[30] Projects with onsite renewable systems are being tested, including one relatively small 4 MW data center proposing a solar array with battery storage in Illinois,[31] and those projects could scale up.[32] The push for data centers to co-locate with renewable energy is getting called "BYONCE" (Bring Your Own New Clean Energy).[33]

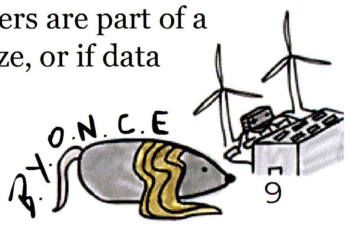
If they wanted to, data centers could also find more direct ways to source **offsite** clean energy through agreements for newly built renewables on the same grid as the data center, that produce power at the same time that the data center consumes it. Google, which has a policy of procuring this sort of 24/7 Carbon Free Energy, reported that they signed contracts last year for 4 GW of clean generation in the form of long-term power purchase agreements.[34]

But most data centers are relying on utilities to respond to their energy needs.

How do the utilities feel about providing the energy?

Good, but maybe a little stressed. Utilities may reference their "obligation to serve" any customer who locates within their service area and suggest there is nothing that can be done to slow down data center growth or require they be powered with clean energy.[35] In reality, utilities are under no obligation to serve load under any terms – utilities have the ability to make data centers wait until they can build and deliver power, and to set payment terms that will make data centers pay the full share and protect other customers.

If utilities rush to build power for data centers without setting terms to safeguard, the new capital projects they build would represent a significant risk (primarily for their existing customers, but potentially also for the utility itself).[36] As mentioned, data centers are part of a volatile and speculative industry, and if the data center load doesn't materialize, or if data



centers cut back how much energy they use, utilities could also be left with projects they can't pay for or a "stranded asset" – a power plant that's lost its value, is too costly to run, but still has debt to be paid off. In most cases regulators would approve cost-recovery through the rate base, and existing customers would end up footing the bill.[37]

But, at least for investor-owned utilities, they also stand to make a lot of money from building new infrastructure, so they generally want to sell energy to as many data centers as possible. Utilities are rushing in part because they are competing to attract new demand, not just respond to it: for instance, in Minnesota, Great River Energy (a co-op) and Xcel (an IOU) are each saying they hope to attract significant load from data centers – reportedly 1 GW and 1.3 GW within the next decade, respectively.[38] As a result, utilities are most prominently concerned about not having enough power to add the new load, as fast as data centers want to come online, without impacting their reliability and level of service.[39]

And do utilities have enough power?

Short answer: not enough for what data centers say they'll want, and we're seeing utilities rush to build more.

The longer answer is that utility planning is complicated, utilities have considerable negotiating power, and so a better question is: when and for what exactly? Utilities have to have enough power plants built to serve all their customers at peak times, plus a reserve margin for emergencies. In normal conditions, utilities *could* have significant capacity to accommodate new load from data centers. There is considerable excess renewable capacity available in certain places, or at times, on the grid.[40] But since renewables tend to be among the cheapest generation resources to operate,[41] coal and gas may have considerably more time when they aren't currently running and could be. New demand from data centers could make them run more often. This would include coal plants scheduled for retirement, which are expensive to run, but still available if needed (the bonus for utilities is that as long as the energy from coal is needed, they get to collect those costs from their customers).

But, because there's such a large initial capital investment to get the data center up and running, data centers typically want as much power as possible from the grid, including at peak times. Since utilities need enough capacity for all the new customers that want power at peak load and in extreme conditions, if utilities estimate that they will not have enough power to serve customers at those time, or if building new resources pencil out as more cost-effective than running existing resources,[42] utilities may build a lot more new resources. If data centers cut back the amount of power they use at peak times, that could make a huge difference in what power utilities need to build. Cryptomines and data centers used for AI training could especially be more flexible.[43]

But isn't there also going to be increased efficiency?

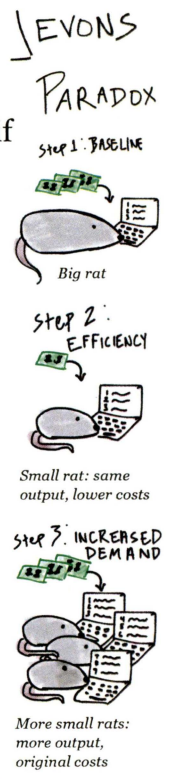
Yes, almost certainly. DeepSeek, the Chinese ChatGPT, recently made headlines for the efficiency of their model.[44] Each generation of chips seems to offer huge jumps in efficiency.[45]

Will that efficiency reduce data centers' impact on our energy system?

It could, but it won't necessarily.

Historically, dramatic forecasts of load growth have proven wrong because of economic bubbles and energy efficiency gains. With the rise of the internet in the early 2000s, the dot-com bubble burst and efficiency kept energy demand more stable than predicted, even with growth.[46] Efficiency kept data center electricity usage almost stable, even as workload doubled 2015-2020.[47] So efficiency could mean that utilities won't actually have to provide quite as much energy as they are warning.

But, tech executives and analysts believe (and in many cases are motivated to make others believe) that demand for the industry and new AI is limitless, far outpacing potential efficiency gains.[48] If there is more growth in demand than in efficiency (called the "Jevons Paradox" or rebound effect when lower costs from efficiency are what drive up demand), or if data center infrastructure is built and efficiency gains aren't adopted sector-wide, efficiency alone may not be enough to reduce the total amount of energy that data centers want.[49]



It's also worth noting that if efficiency gains are adopted and data centers unexpectedly cut back on their energy use, it would increase the risk of stranded energy assets and could end up costing utilities and their customers.

How could our energy system's response impact people's lives?

In addition to climate, there are three main buckets of concerns from the power system, all intersecting: reliability, affordability, and local environmental impacts.

In terms of **reliability**, data centers pose risks for both energy delivery and supply. On the delivery side, data centers can distort how energy flows through the grid that could exacerbate stress to the grid (through "bad harmonics")[50] or cause outages if they do not offtake the power sent to them.[51] In terms of supply, if utilities are not able to build enough generation and transmission to meet data center load (and face a "power shortfall"), consumers could be faced with more blackouts and overall less reliable energy.[52] Blackouts are dangerous for anyone, and lower-income households of color consistently experience longer outages.[53]

However, as utilities build more infrastructure or run existing, more expensive generation sources, there's a danger that data centers will impact **affordability**. Since data centers are typically offered discounted rates through special contracts, the costs may unfairly be borne by residential and small consumers.[54] There's also a particular concern that utilities will overbuild or keep expensive generators running to meet demand from data centers they think are coming, who for one reason or another never show up – leaving existing customers footing the bill. As low-income and households of color also experience the highest energy burdens, rising rates disproportionately impact those who can least afford it.[55]

Both existing and new power generation have well-known, significant **local environmental and health impacts**, including air toxicity and pollution,[56] water use,[57]

and water pollution.[58] The Gavin plant in Illinois, whose retirement seems to be delayed because of data centers (see below) is estimated to be the most deadly coal plant still running, responsible for 244 premature deaths per year.[59] Retiring the coal plants could make a huge difference – but replacing them with natural gas, as in a WeEnergies proposal in Wisconsin, would perpetuate pollution burdens.[60]

And you also mentioned they use a lot of water?

Yes. Most of the water that data centers withdraw is used to cool the servers. In the cooling systems, a majority of the water is evaporated – so it's "consumed" – rather than "discharged" and returned to the local system. Not all systems require the same water purity, but most do require potable water, typically sourced through municipal systems. In a majority of data centers, all the water used is freshwater. Some water used for cooling can come from recycled and wastewater sources treated onsite, and occasionally saltwater.

How much water a data center uses depends on the local climate and cooling technology.[61] The impacts of water use depend on the water source, availability, cumulative system strain, and water discharge. It is sometimes claimed that AI or data centers' water use is extremely minimal,[62] but for the most part that's not yet true. Entirely air-cooled systems are much less energy efficient, except in cool climates, and not as popular. A new method of cooling, referred to as "non-evaporative" "closed loop" or "liquid" cooling, does seem like it could drastically reduce the amount of water needed onsite, although more evidence is needed for this method to be regarded as "zero-water."[63] Most data centers are not being built with the most advanced non-evaporative cooling systems, and those built before new systems are proven cost-effective will continue to draw significant amounts of water each day.

In Google's 4 sites within RE-AMP states (one in Iowa, three in Ohio), they reported withdrawals of over 1.5 billion gallons of potable water in 2023 – of which about 395 million was then discharged, and 1.1 billion was evaporated and consumed.[64] For reference, the city of Minneapolis, with a population of 430,000, reports pumping and delivering approximately 21 billion gallons a year.[65]

Data Centers in the Midwest

There are at least 335 operating data center sites within the RE-AMP footprint, with the largest concentrations in Chicago and Central Ohio (see figure 2). According to an analysis by EPRI, data centers consumed as much as 15.5% of North Dakota's electricity in 2023, 11.4% of Iowa's, 5.5% of Illinois's (see figure 3).

Where information is available, data centers are often referred to by "installed capacity," which means the maximum amount of energy that the servers could draw (measured in megawatts). Most of the operating data centers in our region are relatively small (under 10

MW), and some of the largest data centers already in operation in our region are:

- **Google (500 MW)**[66] in Council Bluffs, Iowa opened in 2007 and is actively expanding.[67]
- **Meta (310 MW)**[68] in Altoona, Iowa broke ground in 2013. At 5 million square feet of space, it was, as of 2022, one of the largest data center campuses in the world.[69]
- **Meta (260 MW)**[70] in DeKalb Illinois, at 2.3 million sq ft, began operations in 2023.
- **Atlas Power (240 MW**, with plans to expand up to 700 MW**)** in Williston, North Dakota began operations in 2023.[71]
- **Microsoft (200 MW)**[72] in West Des Moines, Iowa, where ChatGPT was originally trained,[73] initially opened in 2012 and is rapidly expanding (up to 900 MW by 2027).
- **Amazon (160 MW)**[74] in Hilliard, Ohio, first broke ground in 2015 and has now finished a fifth building, with two other Amazon campuses growing nearby.[75]

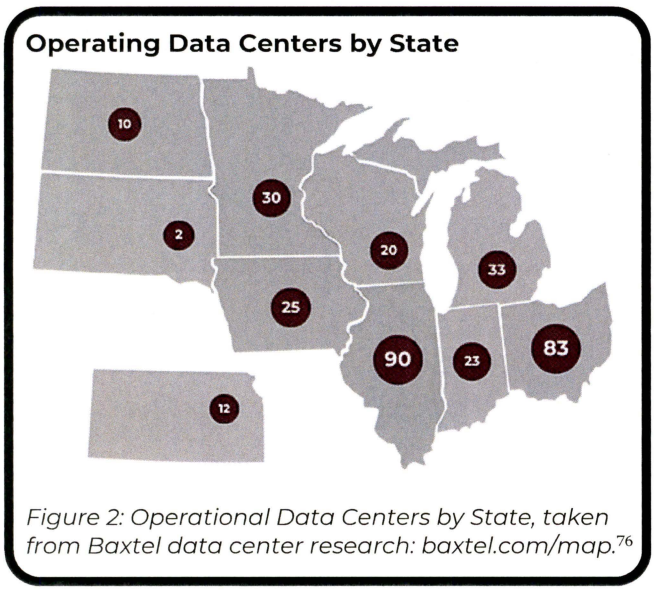


Figure 2: Operational Data Centers by State, taken from Baxtel data center research: baxtel.com/map.[76]

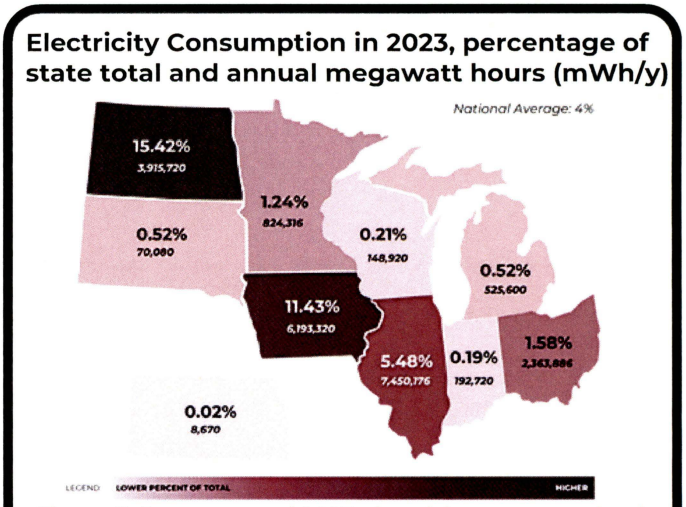


Figure 3: Data centers' 2023 electricity consumption by state, drawn from EPRI estimates. [77]

That kind of seems like a lot! And there are more coming?

More data centers and bigger data centers. Largely on account of AI, the size of individual data center proposals is ballooning (with many proposals now 100+ MW, and the average size of a US data center projected to grow from 40 MW today to 60 MW by 2028).[78] Collectively, they are both adding to load in places with existing concentrations of data centers and expanding into new markets. Once a few hyperscalers establish a market, there is often a rush of additional proposals – as we're seeing now in Des Moines, Minneapolis, Central Ohio, Northwest and Central Indiana, and Southeastern Wisconsin.

In the process of this research, we identified **over 90 data centers** that have been planned for our region since Jan. 2024, including those that are now under construction and those at earlier stages. We have included active data center plans known for our region in the map below, although there are new proposals each day – as well as some delays[79] and cancellations,[80] and likely many more small plans that do not receive headlines (see figure 4).

Planned Data Centers in RE-AMP States

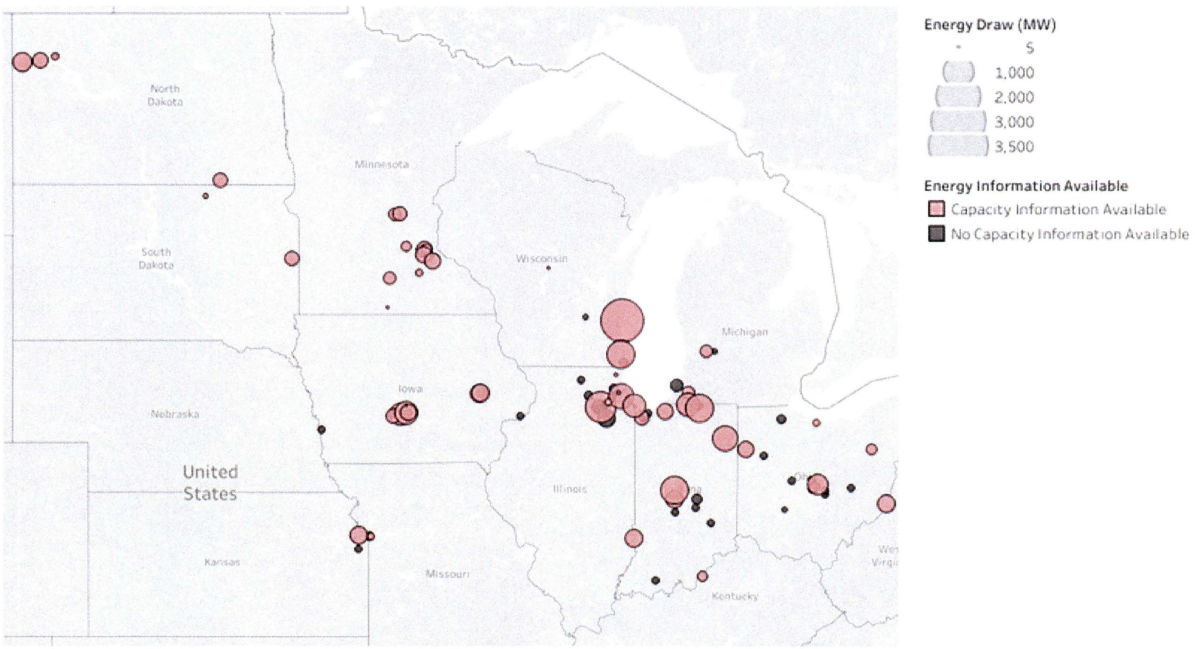


Figure 4: Planned data centers in the RE-AMP footprint. Details can be found in the appendix.

Who's behind those proposals, and which are the biggest?

The four major hyperscalers (Amazon, Google, Microsoft and Meta) are all active in our region. Microsoft's 1.5 GW proposal in Mount Pleasant, WI (whose later stages have been paused) and Amazon's 2.3 GW plans in New Carlisle, IN are among the largest.

"Powered shells," which are built without a clear customer in mind but meant to be filled by hyperscalers, are also among the largest. These include a 3.5 GW Cloverleaf proposal on a 1,000 acre plot in Port Washington, WI (3.5 GW would be enough to power all of Wisconsin's households), a 1 GW proposal in Des Moines from Corporate Office Properties Trust (COPT), and a 1.2 GW proposal from T5 under construction in Grayslake, IL.

There are large proposals from colocation data centers that rent out space, who are now looking to rent to AI customers, including a 612 acre QTS proposal in Cedar Rapids, IA and a 800 MW Cologix proposal in Central Ohio. Our region is also seeing proposals for sites transitioning from Bitcoin to AI, including one in North Dakota expanding from 180 MW to 400 MW,[81] and another in Michigan expanding from 30 MW to 340 MW to accommodate AI.[82]

Why are they coming to the Midwest?

Data centers are expanding in most places across the globe,[83] and some places like Virginia are seeing far more data center construction than we are (see figure 5). But as the top data center markets get increasingly saturated, emerging and mid-sized secondary Midwestern markets are expanding rapidly for a few reasons.

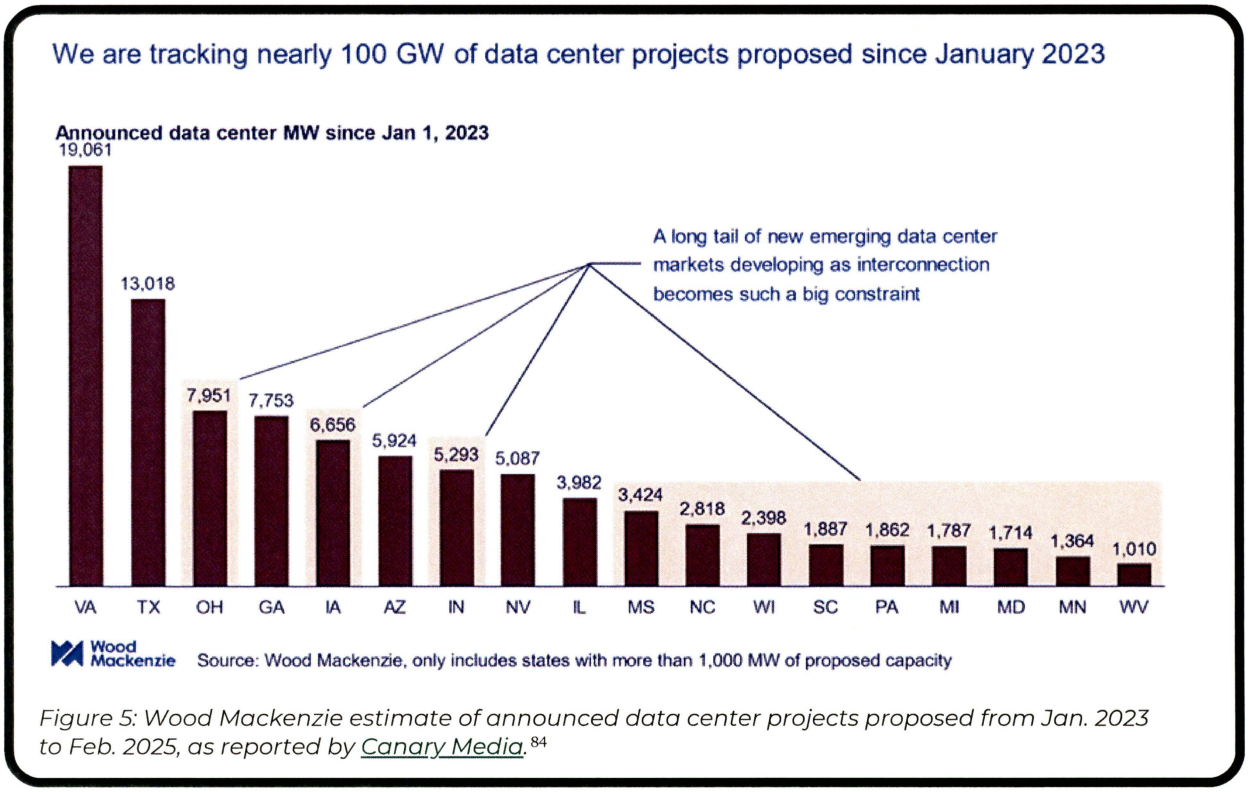


Figure 5: Wood Mackenzie estimate of announced data center projects proposed from Jan. 2023 to Feb. 2025, as reported by Canary Media.[84]

The deciding factor for data centers these days is readily available power.[85] Some areas of the Midwest may be particularly attractive for their high mix of renewables, although areas like Ohio and Indiana are among those with the most proposals, and they have very dirty grids. The Midwest is also water-rich, or has the impression of being water-rich, and is often quite cold, which allows for more efficient cooling. Land is often relatively cheap, and there is fiber-connectivity available.[86]

Most RE-AMP states have generous tax incentives for data centers, although it is not clear what role tax incentives play in attracting companies. Previous research showed that in general, companies are likely to make the same decision around 75% of the time, regardless of incentives[87] and in the case of data centers, an executive from Microsoft responsible for building them has been quoted saying, "I can't think of a site selection or placement decision that was decided on a set of tax incentives."[88] Nevertheless, since 2019, states with existing incentives (including Indiana, Iowa, Michigan, Minnesota, North Dakota and Ohio) have looked to considerably expand their offerings, and those without incentives have looked to introduce them. These can incorporate requirements for job creation, pay, or minimum investment, and could hypothetically be tied to any legislative priority (clean energy, etc.). On the next page is a table of RE-AMP state-level incentives for data centers specifically, though other incentives may exist that data centers can take advantage of (see Table 1).

Are any states attempting to regulate their growth?

Some.[89] Within RE-AMP, Illinois,[90] Indiana,[91] Minnesota[92] and North Dakota[93] legislative proposals would study or regulate data centers. However, other bills were introduced in both

Minnesota[94] and North Dakota[95] meant to further support data center expansion, and Indiana's bill also includes provisions that would raise costs for consumers, reduce regulatory oversight over new power generation, and make it more difficult to retire coal plants.[96]

Table 1: State Data Center Incentives. A more detailed version can be found in the appendix.

State	Year(s)* * asterisk indicates a bill not (yet) passed	Data Center Tax Incentives
IL	2019, amended 2021	20-year use tax, service use tax, and occupation tax exemptions. No certificates issued after July 2029. Minimum investment, building certification, job, and wage requirements.[97]
IN	2009, amended 2019 | 2025	25 or 50-year gross retail and use tax exemption. Minimum investment and wage requirements.[98] HB1601, which passed this session, expanded the data center credit to other advanced computing.[99]
IA	2007	Tax exemption on purchases. Minimum investment and building certification requirements.[100]
KS	2025	SB98 passed both houses and was sent to the governor Apr. 11th, introduced a 20-year sales tax exemption on equipment and costs (not electricity). Minimum investment, job, construction, power, water conservation requirements.[101]
MI	2015, extended 2024	Sales and use tax exemption. Minimum investment, jobs, wage, building certification, water source, clean energy procurement, and electricity rate requirements. The exemptions go through 2050, or 2065 for brownfield sites.[102]
MN	2012, amended 2019 | 2025	Previously 20-year sales and use tax exemption, up to 2042. Minimum investment requirements.[103] A bill passed this session in the legislature to revoke the tax exemption on electricity, but extend the rest to a 35-year exemption.[104]
ND	2015, amended 2021	Sales tax exemption.[105]
OH	2013, amended 2019 | 2025*	Sales and use tax exemption. Minimum investment and cumulative wage requirement.[106] This year's budget may repeal the exemption.[107]
SD	NA | 2025*	No specific data center incentive yet. SB177, which failed in the Senate on Feb. 13, would have exempted data center purchases, with maximum purchase cap.[108]
WI	2023	Sales and use tax exemption. Minimum investment requirement.[109]

How are data centers impacting power generation in our region?

The short answer is that, in response to data center growth, utilities are extending the life of existing resources – in particular, coal and nuclear plants – and working to build new resources as fast as possible (with a special focus on natural gas). They're doing this because they are obligated to serve new customers, want to profit off new customers, and want to do so without impacting reliability for existing customers.

There is reason to be skeptical of how many new resources utilities need to build to meet data center demand. As consumer advocates have pointed out in PJM, one of three regional transmission organizations (RTOs) balancing the grid in RE-AMP states, there are no clear rules for how utilities report project-level demand from data centers and these forecasts may be adjusted for data centers with no firm commitments that may never be built.[110] If you're interested in more detail on how those determinations get made, we'd highly recommend connecting with RE-AMP member organizations (such as environmental groups in MISO or CUB Illinois in PJM) who are active in RTOs or the regulatory space.

While the majority of new resource additions in our region are solar and will most likely remain solar, in this research we identified at least 9 coal plants whose retirements have been impacted by data centers, 3 nuclear facilities impacted by data center growth, and at least an additional 5.5 GW of gas generation planned to come online in the next 5 years in response to growing demand (see figure 6):

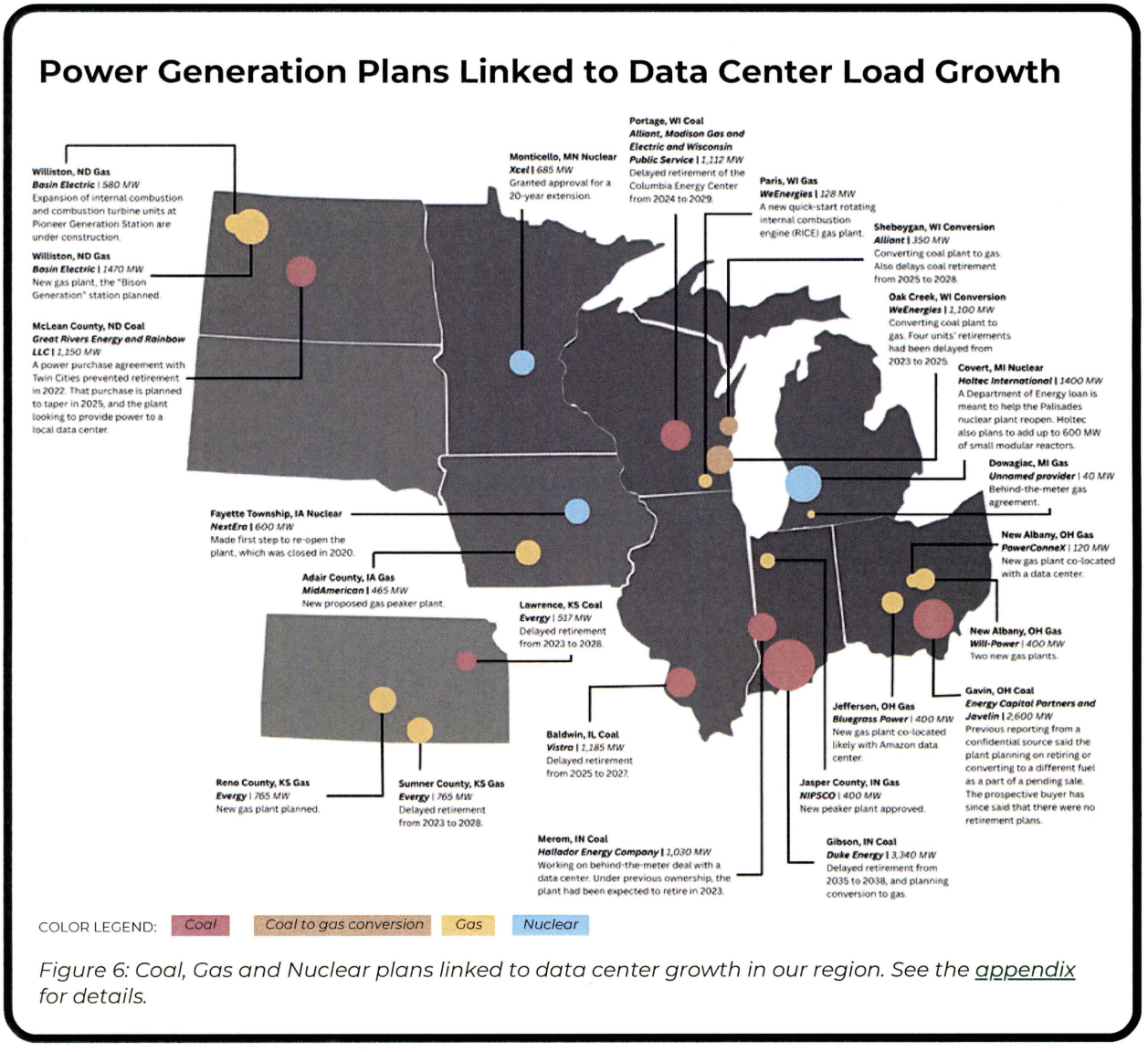


Figure 6: Coal, Gas and Nuclear plans linked to data center growth in our region. See the appendix for details.

The coal facilities whose retirements have been impacted by data centers in our region, listed above, produced 45.6 MMT of carbon equivalent emissions in 2023. The proposed new gas plants could cumulatively, conservatively, produce an additional 11.5 MMT of carbon equivalent a year.[111] Data centers are not the only form of added load linked to coal retirements or new gas generation – for instance, the retirement delay for the Lawrence, KS coal plant has been attributed to both a Meta data center in Kansas City and a Panasonic EV battery plant.[112] But data centers are unique for the scale and pace of their current growth.

What about our water?

Much of our region is facing drought conditions, especially right now in the Dakotas.[113] In watersheds that rely on groundwater, including the Great Lakes watershed, the water table has declined over the past 40 years and have seen record lows this decade.[114] While data centers are not necessarily the largest water users in a city,[115] they can require millions of gallons of water withdrawals a day that don't return to the local system.[116]

How would data centers impact communities in the Midwest?

In addition to the harms described above, data centers could deliver benefits to struggling communities in the Midwest. However, there are concerns that benefits from data center growth may be overstated in order to draw value from our region and paper over concerns that communities may have. Above all, it is important that communities, especially those who have the least access and are most directly impacted, have the information and capacity available to engage fully and weigh the local impacts.

Among the most significant benefits data centers could bring are tax revenue, jobs, and local investment. Mayors and local officials (and utilities) often cite data centers' potential contributions to tax revenue, and the infrastructure it could fund, even considering incentives.[117] While data centers tend to overstate the number of jobs they create,[118] they do create a real, if temporary, boost to local construction jobs and approximately 50 full-time jobs including IT technicians and security, half of which may be contract employees.[119] Data centers tout huge investments, in the hundreds of millions of dollars, but they do not always contract locally, as in the case of New York-based Turner Construction building a $2B Vantage Data Center in Ohio.[120]

New data centers do always buy land locally. They don't always fit into a clear zoning category, and in areas without specific data center siting and permitting requirements, it can be permitted within commercial, light industrial, or heavy industrial zones depending on the specific proposal and decision makers' discretion. Data centers in RE-AMP states have been proposed for rezoned farmland,[121] residential homes demolished to build the data center,[122] a former golf course,[123] near an old paper mill,[124] and in an industrial park on recently annexed land,[125] among others.

Communities may also be concerned that data centers add to light pollution, traffic, and noise pollution. Data centers can have varied effects on property values, depending on the

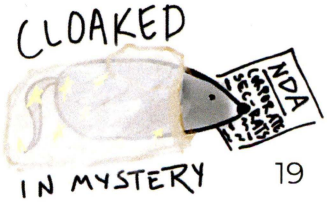
community and the proximity to the data center. But, often, when one data center enters a community other data centers will follow – this may restrict the supply of homes and raise property values, and it may also limit the diversity of development, potentially making the area less attractive to residential or small commercial buyers.[126]

Communities often face a lack of transparent information on data center proposals when weighing all these considerations. New proposals can be submitted under the name of a local construction or real estate firm before their owners are revealed, information about water use and sourcing is frequently kept secret, and details of the data center plans are often protected by non-disclosure agreements (NDAs).[127]

So, how are communities in the Midwest responding to data centers?

Each community responding to a new data center or data center proposal has its own story. We'll offer five, in brief:

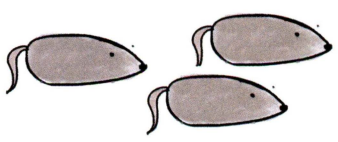
- In **Ellendale, ND**, the growth of the Applied Digital data center brought population and new investment to a town of 1,200 people. Given Ellendale's size, this growth is causing a housing shortage. Applied Digital, which continues to expand their Ellendale site,[128] has announced that they will build 20 homes and a 35-unit apartment building by leveraging state loans from the Bank of North Dakota's Rural-Workforce Initiative to Support Housing (R-WISH) for towns of less than 20,000.[129]
- Residents living nearby to the Atlas Power data center in **Williams County, ND** are suing Atlas Power over noise pollution.[130] The data center spent $5M on a noise wall, an expensive but seemingly ineffective solution.[131] While the lawsuit moves forward, the county enacted new ordinances on data centers, and data centers, along with Basin Electric's newly announced 1.4GW gas plant, continue to expand in the area.[132]
- In **Mount Pleasant, WI**, Microsoft is building a $3.3B data center in a technology zone originally set out for the Foxconn development. The Mayor of Racine, Cory Mason, has raised concerns over the lack of investment in the city, which is highly segregated and faced historical underinvestment. Microsoft's growth at the edge of the city, is, according to Mason "redlining in the 21st century. It virtually ensures that low-income folks and impoverished folks are going to remain segregated and lower class." He is advocating that future development be designed to take advantage of a company's capacity to address disparities.[133]
- In **Farmington, MN**, community members sued the City over a planned data center from power-shell provider Tract, claiming the City breached a contract with the Township by not providing enough notice or completing environmental studies.[134]
- In **Chesterton, IN,** residents shared their concerns over air, water, energy, environment, noise, property values, and the sheer scale of a Provident Realty data center proposed for a former golf course. The town council said that they would not support the data center going forward at its proposed scale, and that proposal was withdrawn.[135]



What else are people doing about it?

So much, and strategies are evolving each day. Groups with different focuses and expertise – from organizing to technology to regulation and policy, from water to land use to energy and economics – can be effective while working from their strengths, and coordinating across groups and areas of concerns. We will offer five points of intervention emerging among RE-AMP members within the power sector:

- **Helping activate local voices:** While communities are beginning to organize opposition to data centers, advocates with specialized expertise may be able to equip local groups with better information and help them make connections between data centers, water, clean energy, fossil fuels, energy efficiency, and electricity rates. In Indiana, groups including Just Transition Northwest Indiana and Citizens Action Coalition are showing up to public meetings and working with local grassroots groups to support their testimony, equip them with quality information, and organize their efforts.[136]
- **Utility rates:** Since utilities, and utility regulation, are so intertwined with data center load growth, data centers are coming up in a lot of different types of utility regulation that RE-AMP members work on. One emerging area is special data center electricity rates/tariffs: utilities around the region are proposing new data center rates, and consumer advocates are working to ensure they truly protect residential customers. Indiana Michigan Power (an AEP company) reached a first-of-its-kind settlement in Nov. 2024 in Indiana that would establish a tariff structure requiring large data centers to enter into long-term contracts, pay for most of the energy they expect to use even if they use less, and pay a fee if the project doesn't get built, reduces demand by more than 20% during the contract, or closes early.[137] Citizens Action Coalition was party to the settlement, testifying in support of the tariff, while also calling on the legislature to introduce a moratorium on data center buildout in Indiana.[138]
- **Regulation, broadly:** Data centers, and the generation capacity being built to serve them, may have to go through multiple planning and approval processes. For instance in Minnesota, Amazon was seeking to bypass the certificate of need regulatory process for their diesel generators. With intervention from groups including CURE MN, the Public Utility Commission (PUC) rejected the exception, and while the case is ongoing (and negotiations on tax incentives proceed in the MN Legislature) Amazon has announced they are suspending their Minnesota plans.[139] As data centers become a larger issue, frameworks that address both point-source consumption and pollution alongside indirect impacts will be critical.
- **Grid planning:** regional transmission organizations (RTOs), though often less prominent than utilities and regulatory agencies, are increasingly important as people look to address data centers. At PJM and MISO, groups like CUB Illinois and Clean Wisconsin engage with a high level of credibility and expertise on issues like data center forecasting,[140] emergency measures like fast-track interconnection,[141] and continual discussions of transmission capacity.[142]



- **Demanding better:** "Demanding Better" is the name of a Sierra Club national report and campaign, leaning on Big Tech to live up to their sustainability commitments and use their leverage with utilities to accelerate the transition to clean energy, grid hardening, and advanced efficiency.[143] In our region, "demanding better" could apply to AI uptake policies that connect end-use consumption to the issue of data center construction, and the work of groups including Clean Wisconsin and Wisconsin 350, who wrote an open letter urging Microsoft to power their planned data center in Mt. Pleasant, WI with renewables rather than new gas plants.[144]

Summary

The rapid growth of data centers in our region is bringing some unique challenges, and intensely exacerbating pre-existing challenges, whether that's the length of the generation interconnection queue, perverse utility incentives, or the lack of accountability for large facilities' water use. Different stakeholders, including data center operators, utilities, environmental groups, and local communities, may have intersecting interests or concerns. Data centers are a high-profile example of issues underlying our energy, environmental and social systems. But they also pose an immediate challenge which must be addressed by scaling up strategies now in development, and potentially by introducing novel ones.

Appendix

The appendix contains three supporting tables:

- A full account of data center-specific **tax incentives** within RE-AMP States
- Detailed information on selected **utility projects** linked to data center load growth
- Information behind the map of **data center proposals**

The appendix can be found at: https://www.reamp.org/wp-content/uploads/2025/06/RE-AMP-Data-Centers-Appendix.pdf.

Thanks for reading!

Acknowledgements

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Endnotes

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June 30, 2025

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RE: Hearing on Certificate of Site Compatibility Application — Bison Generation Station (PU-25-086)

Testimony of Nicole Donaghy, Executive Director North Dakota Native Vote

Good morning. Thank you for the opportunity to share public comments.

My name is Nicole Donaghy, and I'm a lifelong North Dakotan, a rural electric cooperative member, and a nonprofit leader committed to supporting healthy, resilient communities across our state.

I'm here today to respectfully express concern about the proposed Bison Generation Station and to request that the Commission require a thorough, public risk assessment before moving this project forward.

I have some serious concerns as a member owner in creating this project in light of recent events. Just last year, a Federal Energy Regulatory Commission administrative law judge recommended that Basin Electric return approximately $471.5 million to member-owners. The judge found that Basin imprudently included costs from its nonutility Dakota Gasification subsidiary, a coal-to-gas operation, into electric rates designed to serve cooperative members. The ruling further criticized Basin for failing to evaluate less costly alternatives to coal-fired generation and for discriminating against certain member co-ops through inconsistent rates and transmission charges. This was not merely a bookkeeping issue, it speaks to fundamental governance and accountability concerns.

Another major concern is that this proposed $4 billion gas plant, one of the most expensive in North Dakota's history, is being developed not to serve homes or farms, but largely to meet the growing demand of out-of-state data centers and crypto mining operations.

That's why I believe a more careful evaluation of financial and environmental risk is necessary before approving the Bison Generation Station.

The current project cost, $2.7 million per megawatt, is nearly triple the cost of similar plants across the country. Basin Electric has yet to clearly communicate what portion of that financial risk will fall on member-owners, nor how ratepayers will be protected if the expected industrial demand fails to materialize. This is especially concerning given

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FERC's recent ruling that Basin misallocated nearly half a billion dollars in costs to members through a previous failed project.

Meanwhile, there are still open questions about the long-term impacts of data centers on our grid, water resources, and rural quality of life. These facilities are known to draw vast amounts of electricity in some cases more than 100,000 homes' worth, and require large volumes of water for cooling, which can strain local supplies during drought conditions like we've seen in very recent years. It is also known that these centers rely on diesel generators for backup power, raising further public health concerns. While the Bison Generation Station may aim to capture natural gas that would otherwise be flared, it does so only to replace one stream of pollution with another, shifting emissions from open flares to diesel generators and combustion turbines that still release harmful pollutants into the air.

As someone who values both innovation and public stewardship, I believe we must pause to ask: Are we building the right infrastructure for the right reasons? And are we protecting our communities in the process?

I urge the Commission to require:

- A comprehensive, independent risk assessment of this project, including financial, environmental, and ratepayer impacts;
- A public explanation of how Basin plans to protect co-op members from stranded assets or rising utility costs;
- A clear plan for robust member engagement and community transparency before moving forward.

This decision will shape our state's energy future for decades. We need to be sure it's a future built on accountability, sustainability, and shared benefit, not just speed or market speculation.

Thank you for your time and thoughtful consideration.