Center for Progressive Reform

Webinar

AI Data Centers in Your Backyard: Who Is at Risk?

July 22, 2025

1-2 PM

Thank you for joining, we will begin shortly.

HOUSEKEEPING

- If you have problems with the webinar audio, you can join by phone at +13052241968 Webinar ID: 856 3635 5219
- All participants will be muted during the webinar.
- If you have questions during the presentation, please type them into the Q&A box located at the bottom of your screen. Your questions will be visible to the moderator and presenters only.
- The webinar is being recorded and will be shared after the event.
- Members of the press may be joining today’s webinar.

Center for Progressive Reform

The Center for Progressive Reform harnesses the power of law and public policy to create a responsive government, a healthy environment, and a just society.

The Center envisions a government that uses the full force of its power to curb climate change and ensure a sustainable environment, economic justice, and healthy workplaces and communities for all.

Our Presenters

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Center for Progressive Reform
(Moderator)

Data Center Permitting

Daniel Farber
July 22, 2025

Introduction

- DOE estimates that power use of data centers could roughly triple from 2023 to 2030.
- This is going to be a jolt to the permitting system, depending on the source of the power.
- Unless on federal lands, solar and wind generally require state or local permits.
- Thermal power plants will require permitting for cooling water.
- Fossil fuel plants will need air pollution permits.

Projects with a Federal Nexus

- A federal nexus could involve federal funding or use of federal land for the data center itself or for an associated power generator.
- Those would bring into play the normal federal permitting process.
- This could require an environmental impact statement or at least an environmental assessment. There might also have to be a Biological Opinion from Fish & Wildlife to ensure Endangered Species Act compliance.
- Trump is trying to short-circuit this.

Dedicated Generation Sources

- A new nuclear plant would require licensing from the Nuclear Regulatory Commission (NRC).
- A new fossil fuel plant would fall under the Clean Air Act. If a major source, it would have to go through preconstruction review.
- Cooling water would also be subject to federal regulation under the Clean Water Act.
- In any event, it would need state approval for compliance with the State Implementation Plan for air pollution.

Data Centers: Water Pollution

- Poor data: Half of data centers don’t even track their own water use. But indications are that it can be quite large.
- In 2021, for instance, Google data centers near one Oregon city used over 355 million gallons.
- Water goes through multiple cycles and concentrates certain pollutants such as total dissolved solids and chloride,
- May require pretreatment or a discharge permit with treatment requirements.
- Also may need state permit to withdraw from water body.

Data Centers: Air Pollution

- Emergency generators for backup power require permitting.
- In nonattainment area, the threshold for New Source review is lower (100 tons/yr). It may be necessary to purchase Pollution Reduction Credits.
- Staying below cap may require limiting runtime.
- Air dispersion modeling is needed to ensure compliance with a variety of air standards.

Power Plants – EPA Proposal

- EPA is proposing changes to speed up air permits for power plants used for data centers.
- EPA plans to allow everything up to actual groundbreaking to take place before the preconstruction review.
- EPA will address “the minimum requirements for public participation when it comes to minor emitters so the protest of a few does not unnecessarily thwart progress for all Americans.”

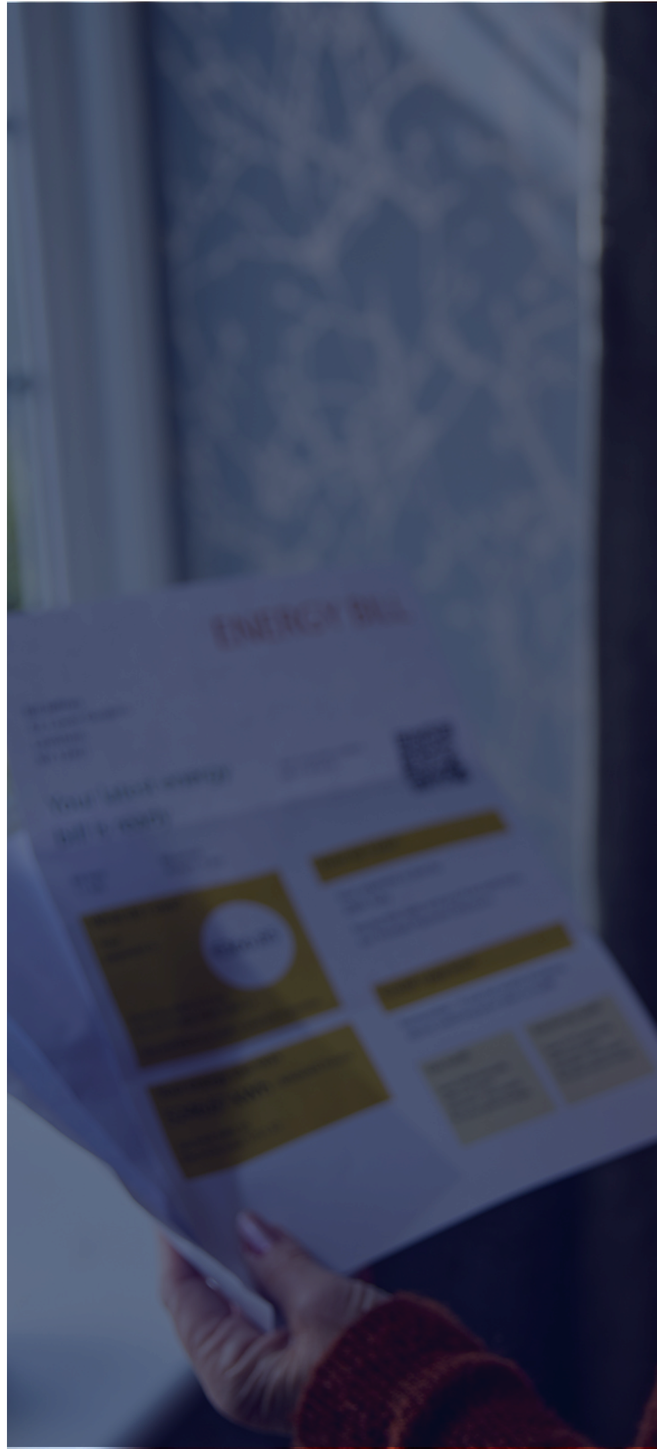
Musk in Memphis

- Musk's xAI installed 35 portable gas turbines without air permits to help power its supercomputer. Notably, this is in a black neighborhood with other industrial sources.
- xAI said that they were only using 15 and the others were just stored there. Thermal images showed more in use. NAACP threatened to sue.
- The local air authority then issued a permit to run 15 generators until 2027. Emission caps set a little below the 100 tpy threshold.

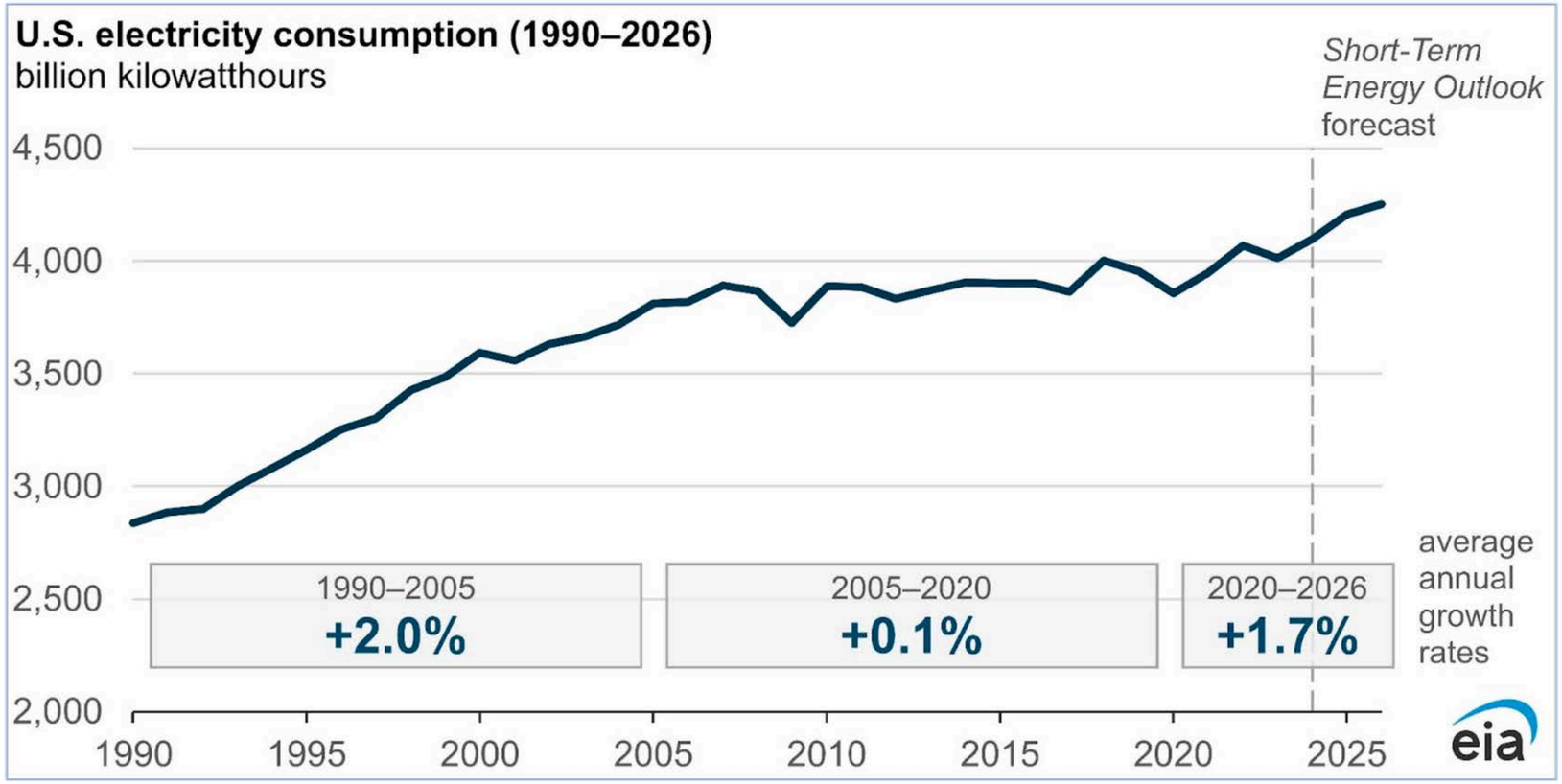
Conclusion

- Especially given Trump energy policy, much of the power for new plants could come from fossil fuels. Trump EPA will try to sidestep requirements and minimize public input.
- Cooling water will also require permitting both for withdrawal and at the discharge end.
- Finally, facilities using federal lands or funds will go through NEPA review, etc.
- **Bottom line:** This stuff is complicated and technical, but likely to become a battleground.

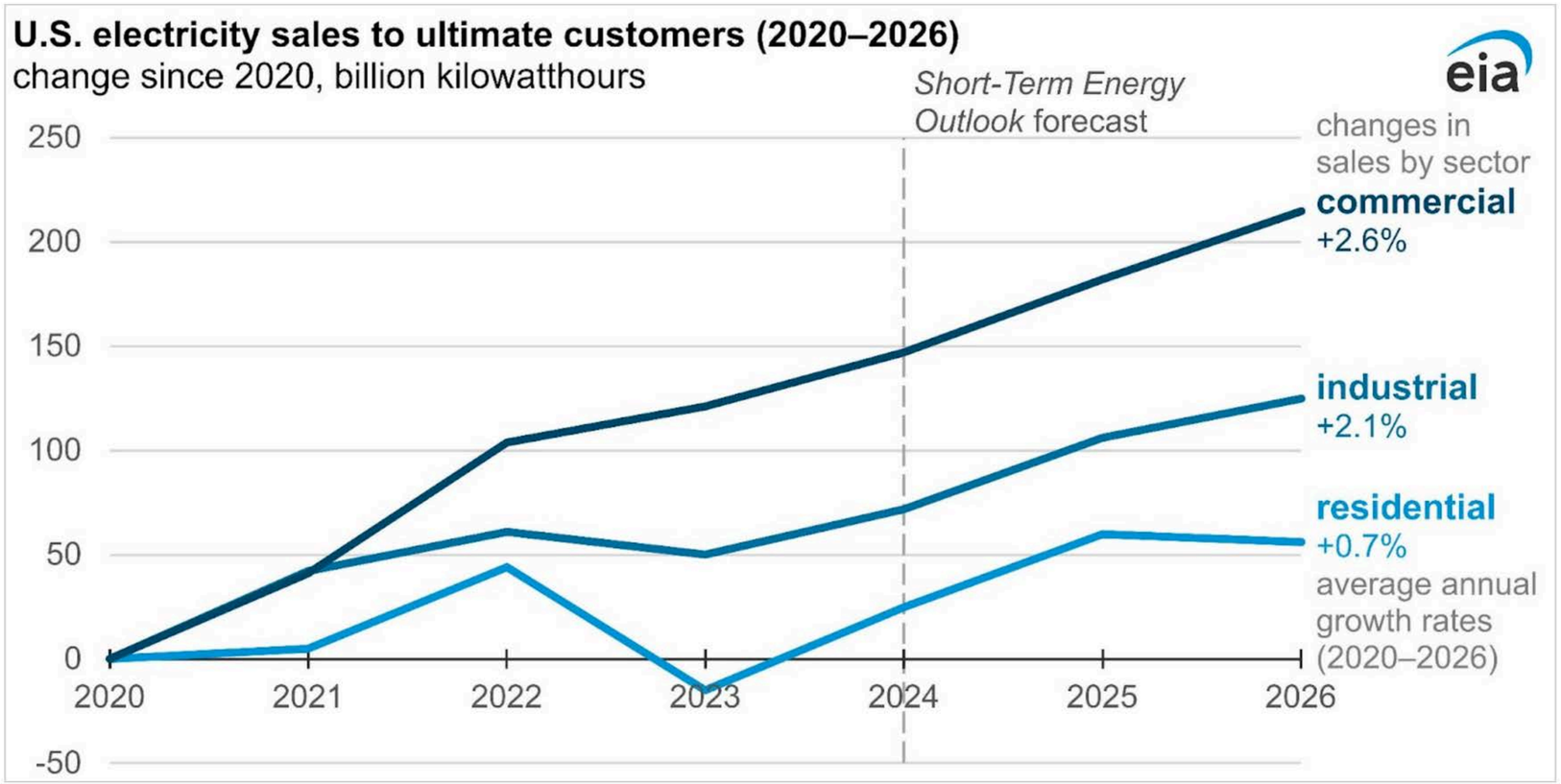
AI, Data Centers, and your Utility Bill



Demand Growth – United States (US Energy Information Administration)



Demand Growth – United States by sector (US Energy Information Administration)



Data Centers - Classifications

- Edge facilities - function largely as relay points between users and centralized servers - largely to reduce latency. Recently, the demand (and power draw) are increasing to meet AI expansion.
- Internal Facilities - traditionally server stacks, usually owned by a business operator for internal storage and computing. Still popular for sensitive data storage.
- Co-Located – large-scale facilities which typically host numerous businesses data storage and remote computing infrastructure under a shared roof. Growth coincided with cloud computing.
- Hyperscale – extreme sized facilities typified by ownership by a single provider, major nexus for AI implementation

Cost impacts of Data Centers (Energy economics)

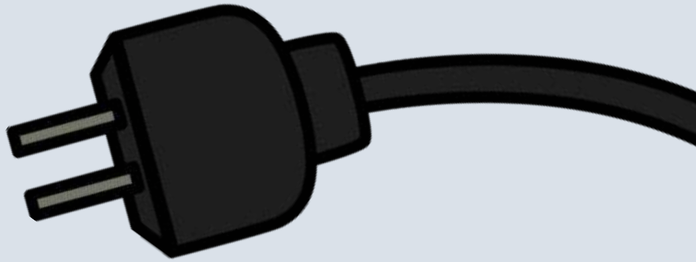
Rising demand
for generation

Cost allocations for
non-benefitting localities

Unrealized or closed facilities
and stranded costs

Impacts, Benefits, and Risks

- Introduction- what are AI data centers?
- Environmental and public health impacts
- Who stands to benefit and who is at risk?
- Are AI data centers necessary?



The Epirus Bow

Louisiana’s Data Center Problem

Alliance for Affordable Energy
New Orleans, Louisiana

ALLIANCE FOR AFFORDABLE ENERGY

EST 1985

KD Minor

Community Solutions Manager

Louisiana's Watchdog

1 Consumer Protections

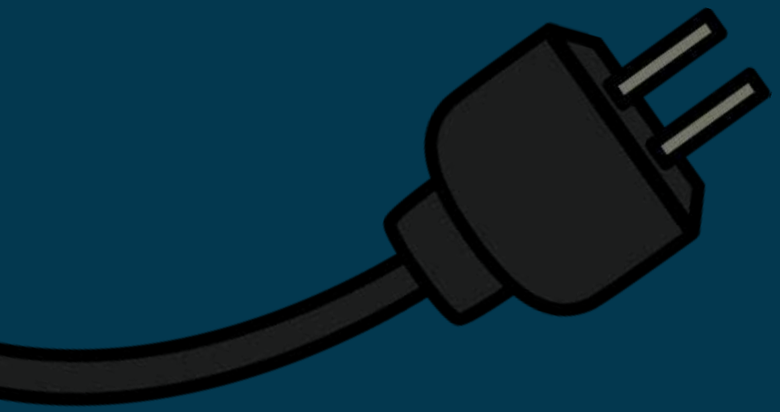
2 Clean Energy

3 Energy Efficiency

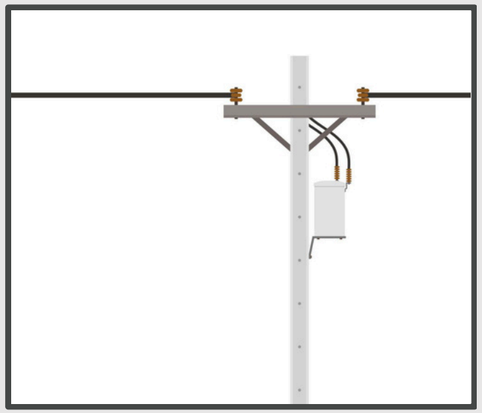
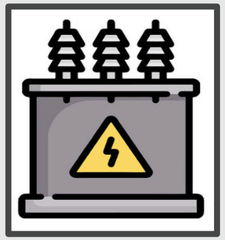
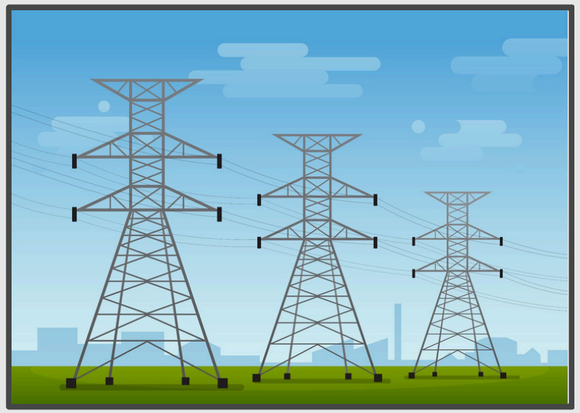
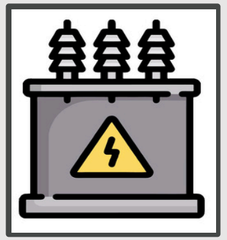
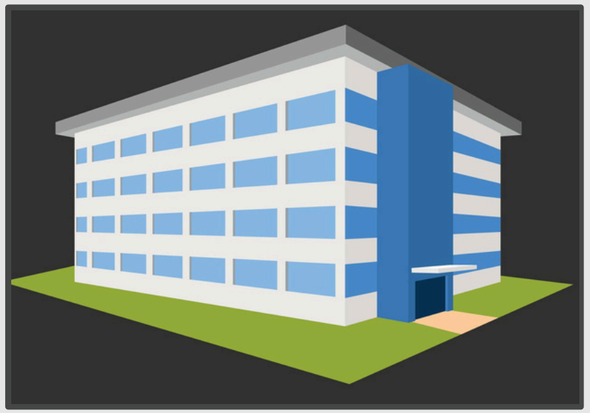
Overview

1 Louisiana's Meta Data Center

2 Data Center Costs and Impacts to Residents

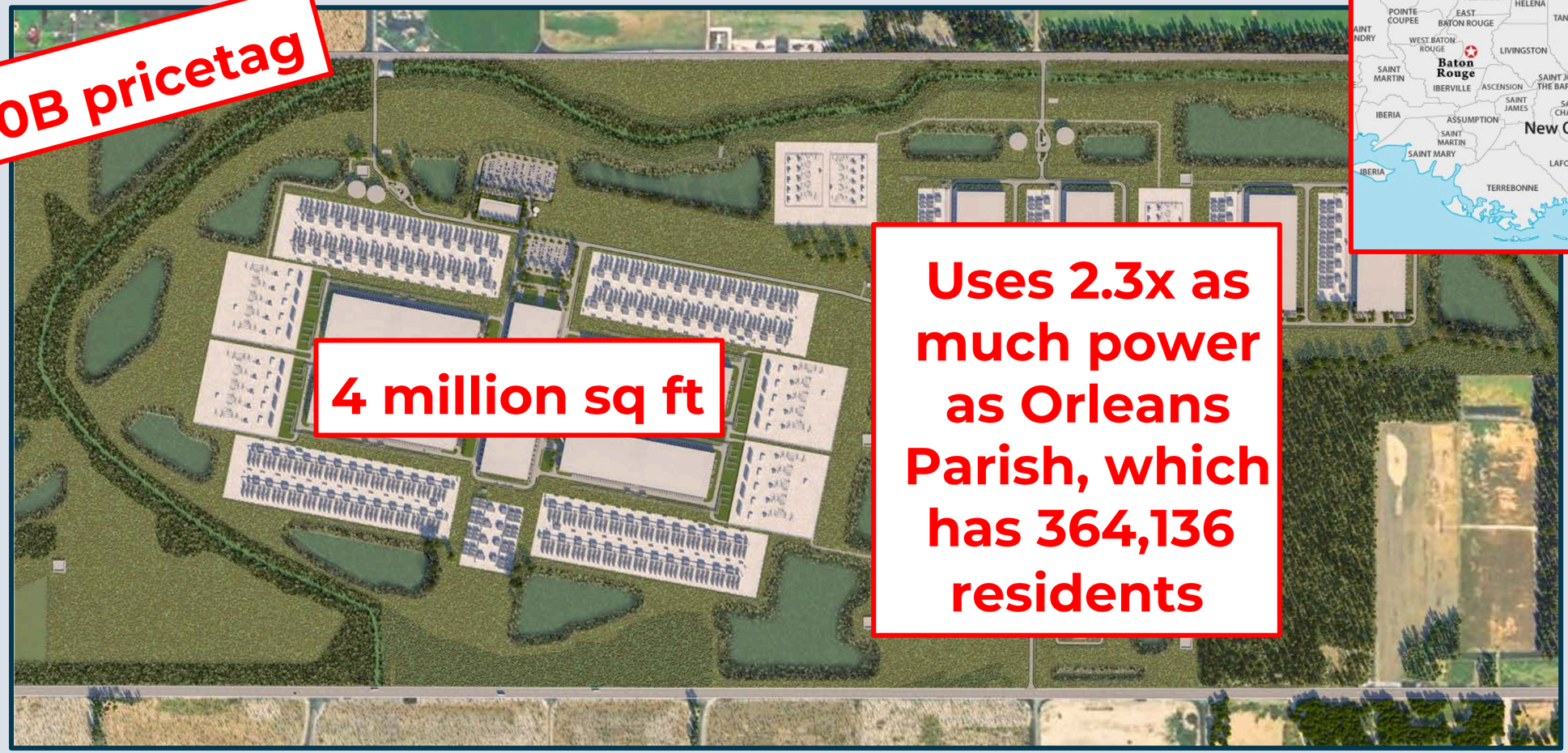


Data centers directly affect our electricity grid

Hyperion

$10B pricetag

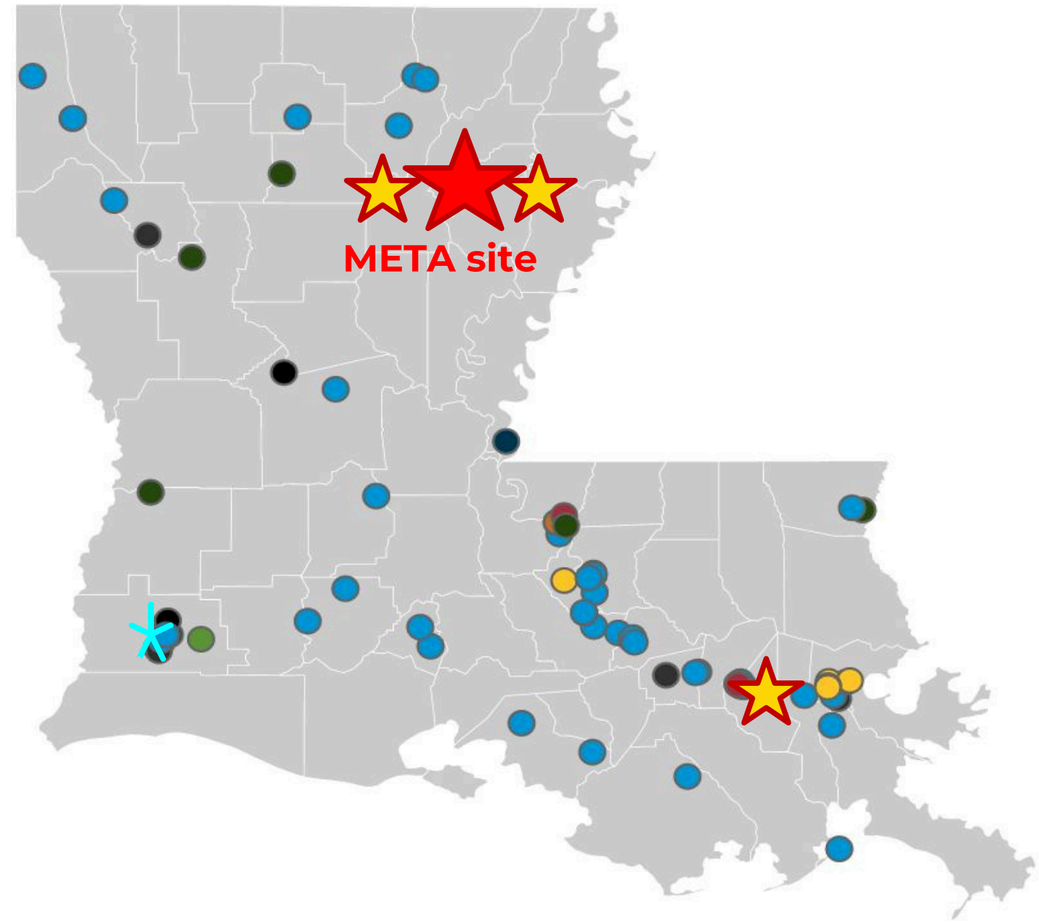


Uses 2.3x as much power as Orleans Parish, which has 364,136 residents

~30 miles

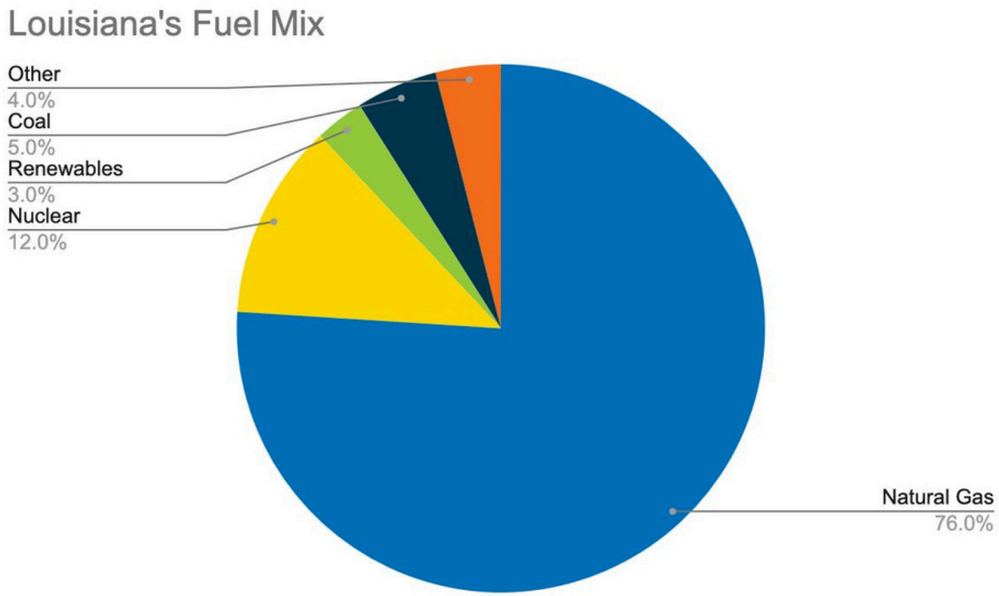
Power Generation

Number of plants for all fuels, Louisiana, all sectors



73 total power plants

- Biomass
- Coal
- Geothermal
- Hydro
- Natural gas
- Nuclear
- Other
- Other fossil gases
- Petroleum
- Pumped storage
- Solar
- Wind
- Wood



The Promises

1. **500 permanent jobs;**
   5000 construction jobs
2. **1500 MW of Renewable energy**
3. **Carbon Capture Integration**

The Risks

1. First hyperscale center in LA
2. No accountability on jobs promise
3. Residents pay for 3 new gas plants
4. Electrical impacts to Richland residents
5. Potential threat to nearby Grand Gulf nuclear plant
6. Sacrificed sales + property tax revenue
7. Major emissions increas
8. Extreme water use
9. Secret political dealings

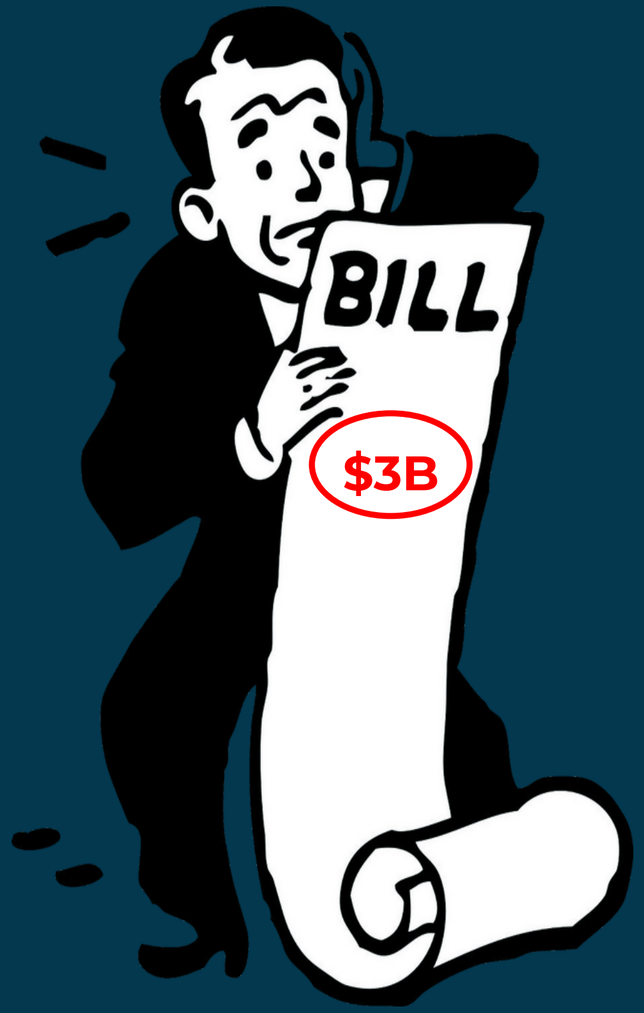
Entergy’s Grand Gulf Nuclear Station in Port Gibson, MS

ABOUT / NEWS

Motion Filed to Defend Louisiana Ratepayers Against Entergy's Attempt to Circumvent Commission Policy

Published Feb 13, 2025

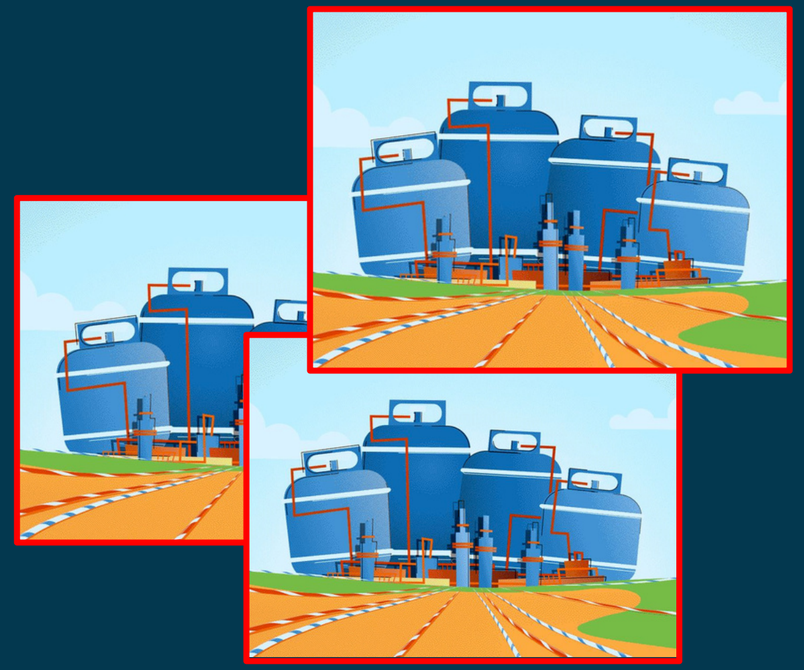
THE COST OF OUR AI USE



No RFP Process

Increases Energy Demand by 25%

3 New Costly Gas Plants



What we’re fighting to win

1. Datacenter pays for 100% of the interconnection costs
2. No subsidies from ratepayers for generation supply
3. Clear criteria for load shifting and reliability impacts
4. Security deposits for failure to perform
5. Consider a microgrid approach to support energy needs
6. Transparency on contract provisions that reflect rates, discounts, reliability commitments, costs to ratepayers

Do Your Part: Reducing Environmental Impact of AI Use:

1. Reflect necessity of usage
2. Advocate and vote for pro-renewable energy regulations & legislation. Support grid enhancing technologies.
3. Add -ai after google search to cease AI search engine

Next Steps

Plug into community

Fight for achievable wins

Develop principles for AI use

Our energy regulators MUST hear from us.
WE must hold them accountable!

CATEGORIES

- [ ] Utility Regulation
  - [ ] Entergy New Orleans
  - [ ] Cleco
  - [ ] SWEPCO
  - [ ] Entergy Louisiana
- [ ] Reliability & Resilience
- [ ] Legislative Priorities

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LPSC Vote Leaves Louisiana Families Without...

05.19.2025 Utility Regulation

Louisiana Consumer Advocate calls on FERC...

05.15.2025 Transmission, Bills & Economics

LPSC To Decide What's Next For...

05.12.2025 Utility Regulation

Lights Out: What We Know About...

05.08.2025 Utility Regulation

Louisiana Spotlight: Carbon Crossroads

04.25.2025 False Solutions, Consumer Protection, Bills & Economics,

Making Energy Resources More Accessible Thanks...

04.23.2025 Utility Regulation

What Protections are Available in Communities

- Grassroots efforts
- Formal coordinated coalitions
- State based advocacy and legislation
- Regulatory mechanisms

Q&A

Center for Progressive Reform

Thank you!

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