Western Resource Advocates®

Data Centers in New Mexico: Air and Climate Impacts

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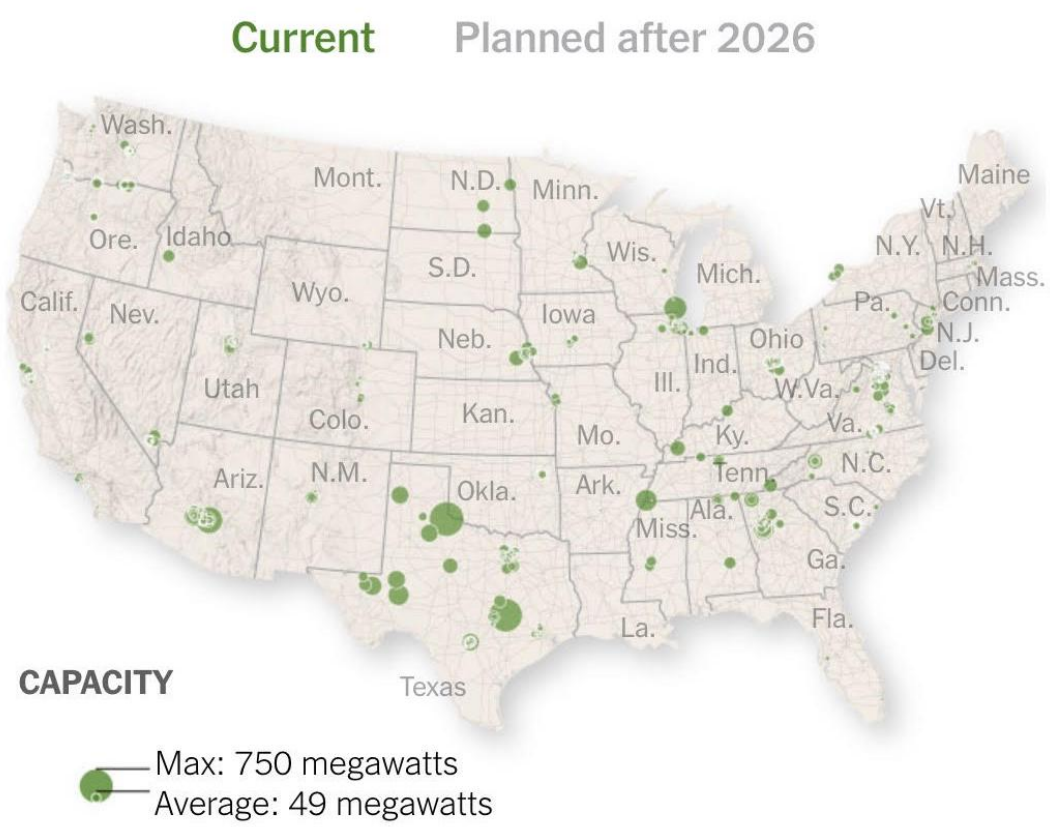
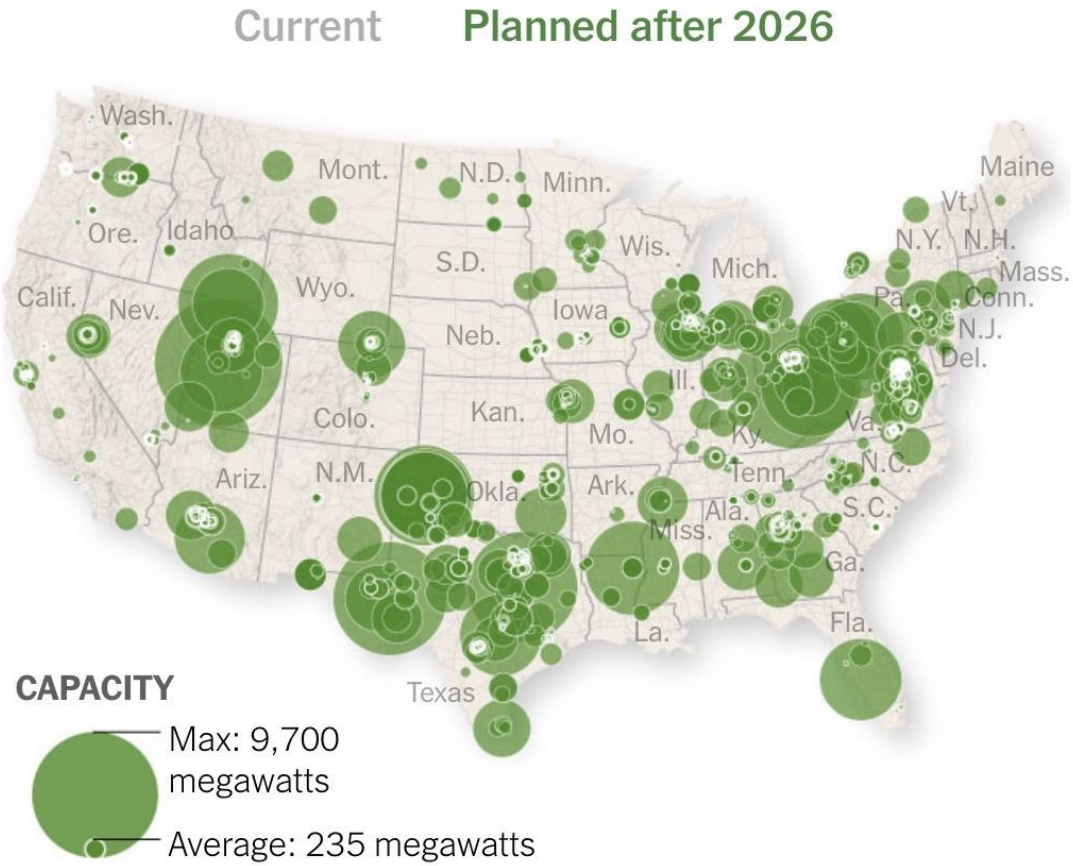
B.S. in Biological Sciences from Arizona State University (2011); J.D. from Harvard Law (2014)

Professional Certificate in Computer Science for Artificial Intelligence from Harvard Online (2025)

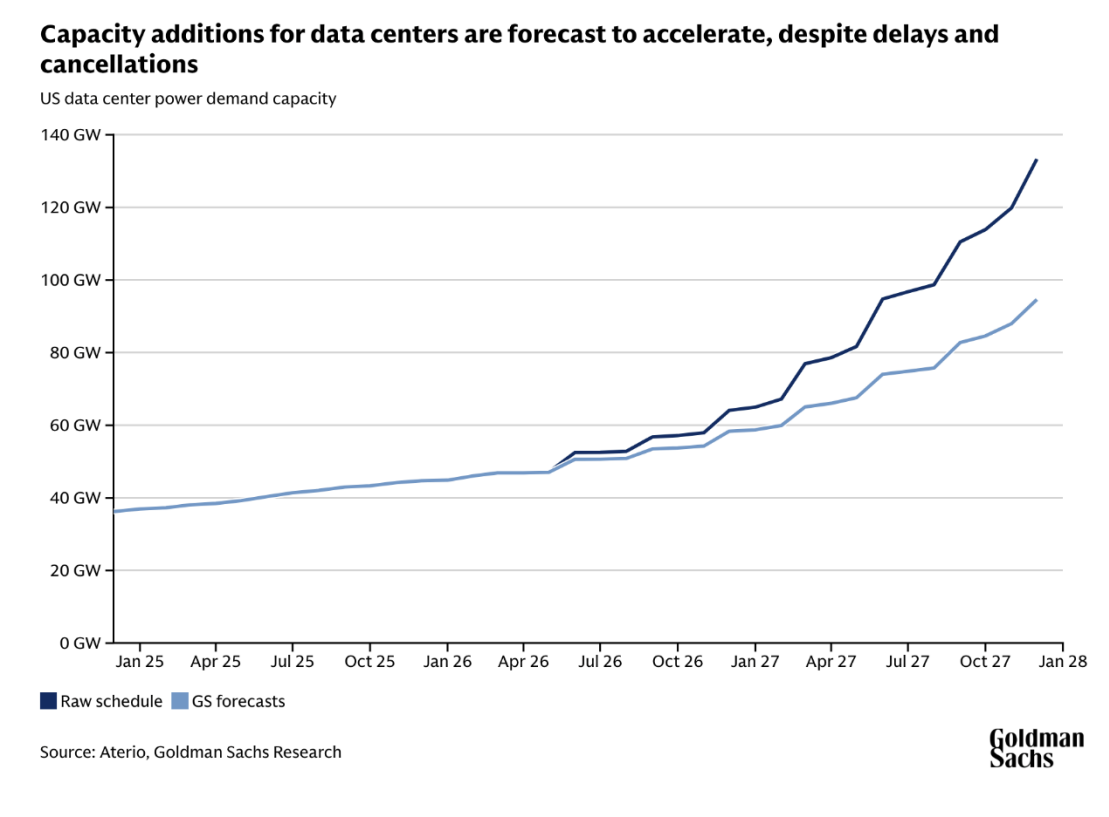
The Number of Data Centers in the U.S. is Exploding





Source: Cleanview

Electricity Demand is Soaring, Due to Data Center Boom

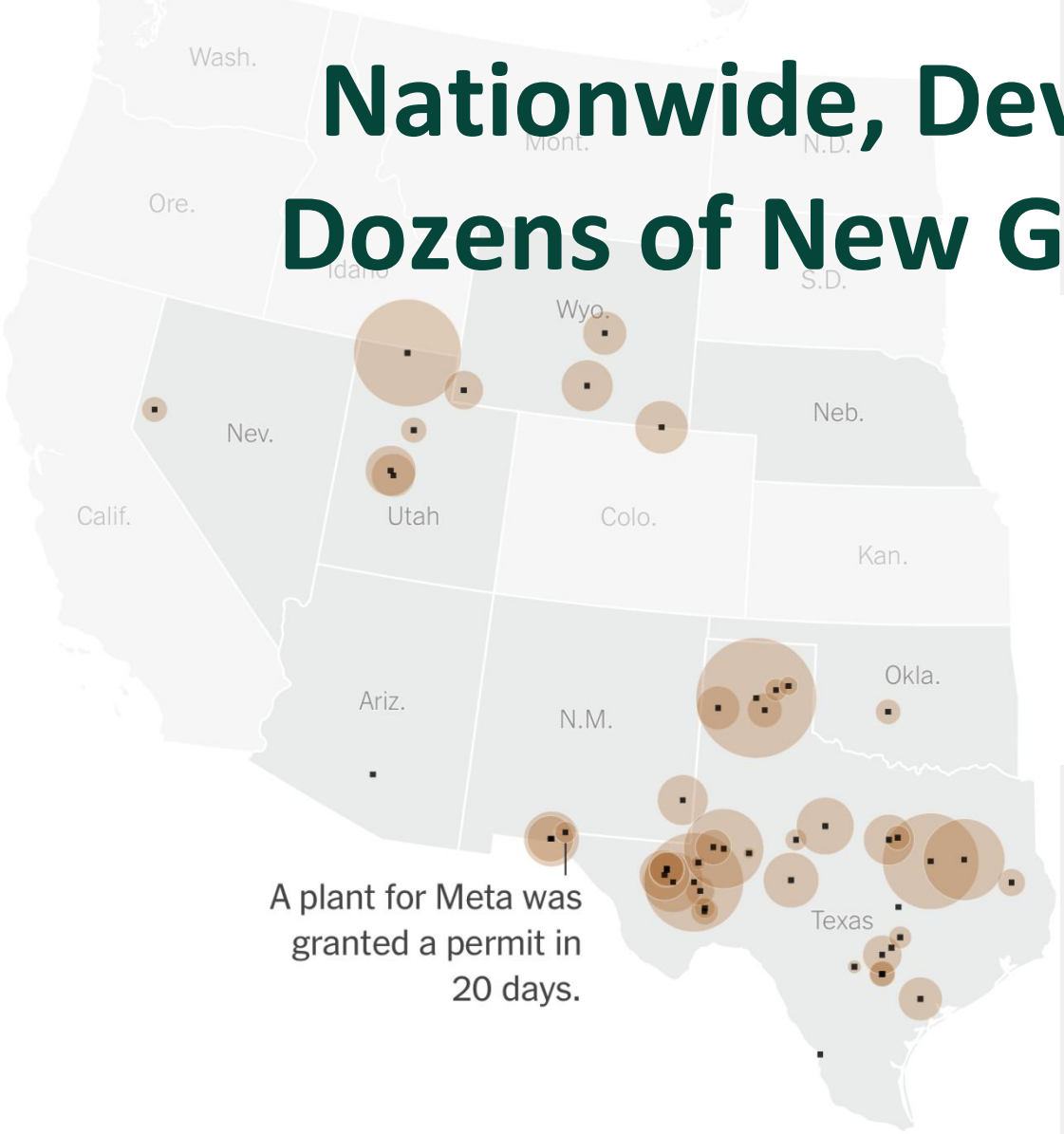


Power demand from U.S. data centers will reach 66 GW in 2027, up from 31 GW in 2025, with summer peaks growing to 8.5% in 2027 from 4.1% in 2025, Goldman Sachs reported May 20. Though AI proliferation is uncertain and growth will vary widely by state, data centers could consume as much as 17% of U.S. electricity usage by 2030, EPRI found.

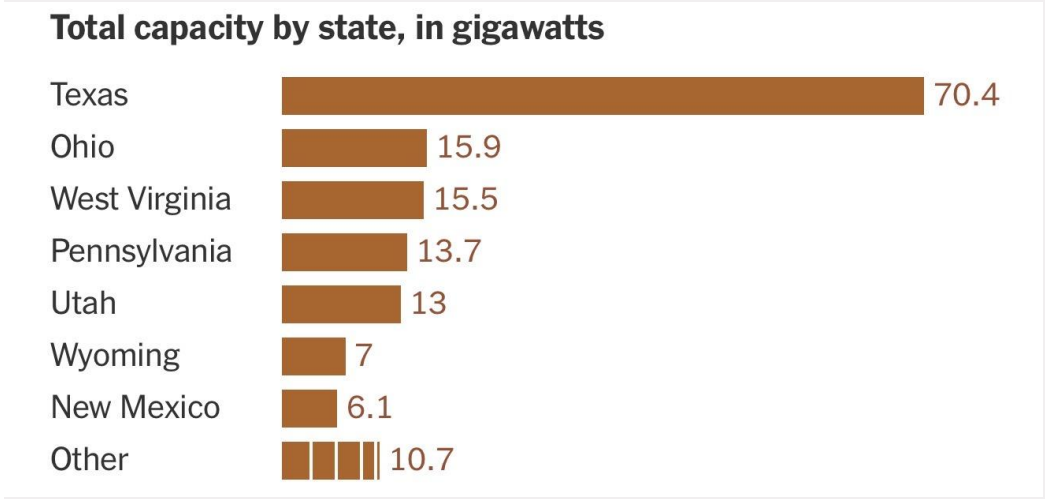
https://www.utilitydive.com/news/data-centers-flexibility-utilities-speed-to-power/822588/

https://www.goldmansachs.com/insights/articles/us-data-center-power-demand-projected-to-double-by-2027

Nationwide, Developers Are Building Dozens of New Gas-Fired Power Plants



Notes: Data as of July 6, 2026. Plants with unknown capacity estimates are shown as dots without circles. Four plants without detailed locations, including one in Nebraska, are not mapped.



Trump's Vision for A.I. Dominance Comes with Major Air Pollution (Aug. 5, 2026)

https://www.nytimes.com/2026/08/05/climate/data-centers-pollution-trump-ai-energy.html

Without Safeguards, New Fossil-Fuel Power Plants Will Doom Climate Goals

Sector	2005 Base Emissions ($MMTCO_2e$)	2021 Interim Emissions ($MMTCO_2e$)	2023 Current Emissions ($MMTCO_2e$)	Change Relative to 2005 (%)	Change Relative to 2021 (%)
Electricity generation	16.33	10.31	6.60	-60%	-36%

https://www.climateaction.nm.gov/cap/

Project Jupiter would emit more than all existing NM power plants combined

Yucca Growth Infrastructure, LLC - YGI Microgrid

Emission Summary - GHG

Unit	Description	CO_2 tpy
SOFC	Bloom Energy Server System	10,144,115
Total		**10,144,115**

YGI application uses short tons. Plant would emit 9.2 MMT, bringing sector emissions to 15.8 MMT—97% of 2005 levels

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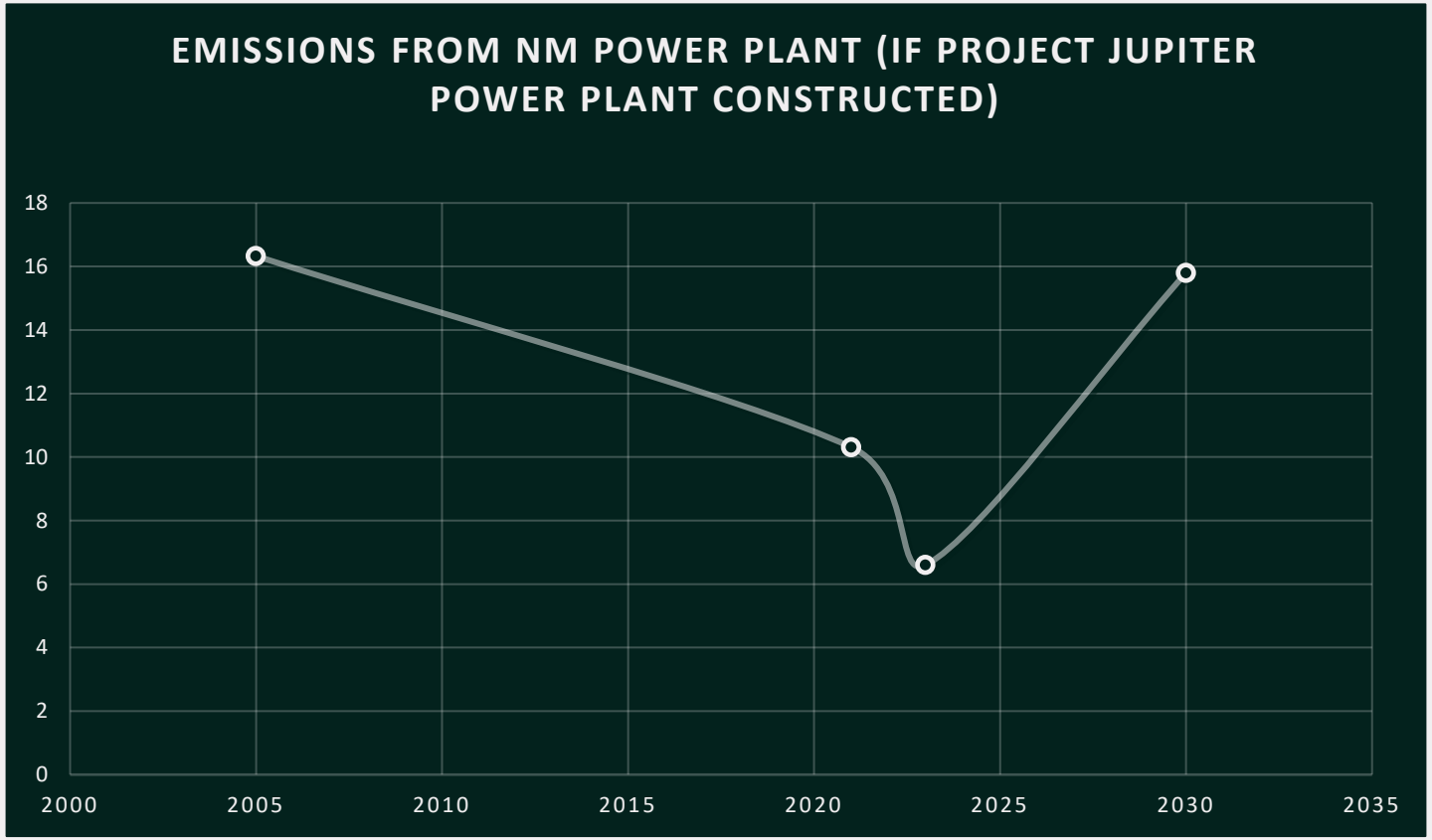


Y = million metric tons, X = year

Fossil-Fuel Power Plants Release Other Dangerous Pollutants

Fossil power plants emit **ozone-forming** pollutants

Elevated ozone levels contribute to heart attacks, asthma attacks and respiratory illness

American Lung Association
State of the Air

2026

Report Cards

County	Grade	Wgt. Avg.
Bernalillo	F	12.0
Dona Ana	F	14.5
Eddy	F	27.7
Lea	F	5.0

Ozone Pollution Harms Public Health

Each year in NM, ozone associated with **~259 premature deaths**

Ozone Pollution in New Mexico: An Economic Analysis of its Human Health Impacts and Damages[1]

Andrew L. Goodkind, Ph.D.

Benjamin A. Jones, Ph.D.

Suraj Ghimire, MA

August 12, 2022

Department of Economics, University of New Mexico, Albuquerque, NM 87131

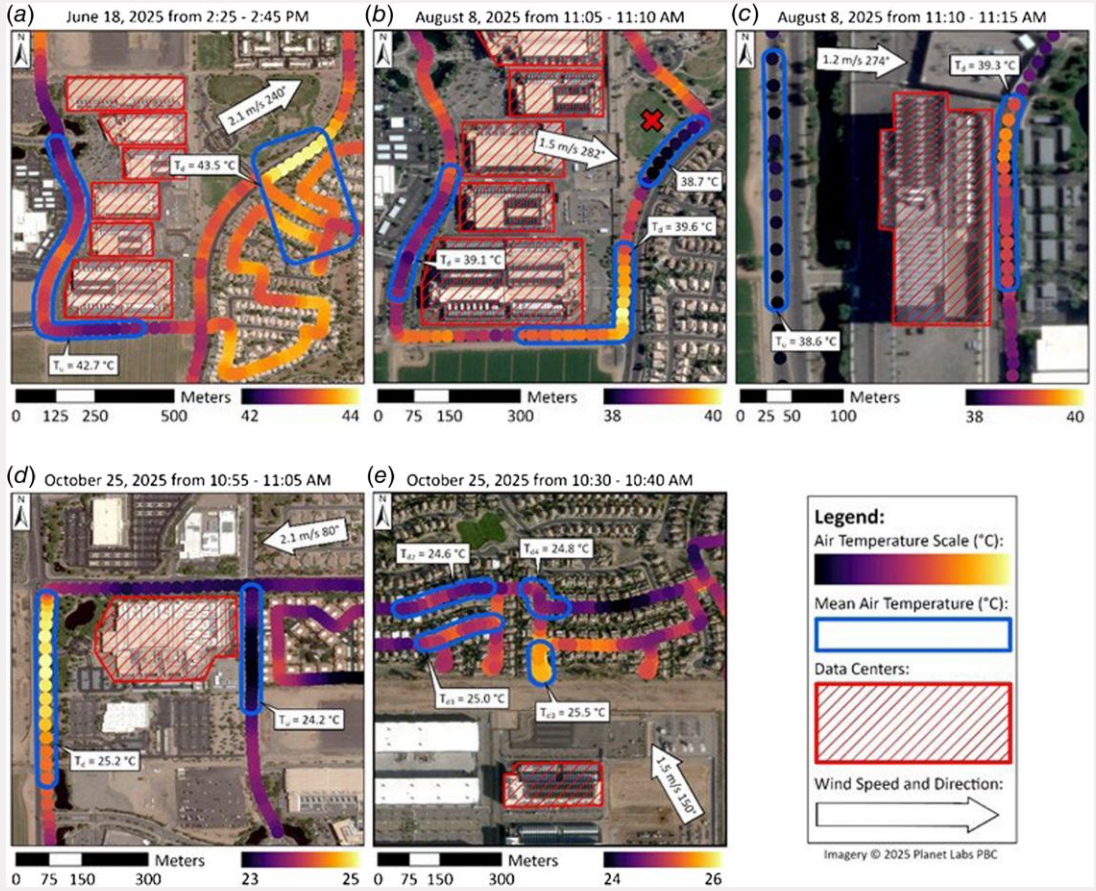
DEPARTMENT OF ECONOMICS

Data Centers Generate Waste Heat

Sailor (2026): Data centers near Phoenix increased ambient air temperatures by up to 2.2°C (4°F)

The data centers studied were SMALL (170 MW or less), did not have co-located power plants

Hyperscale facilities with co-located microgrids are likely to generate even greater heat impacts

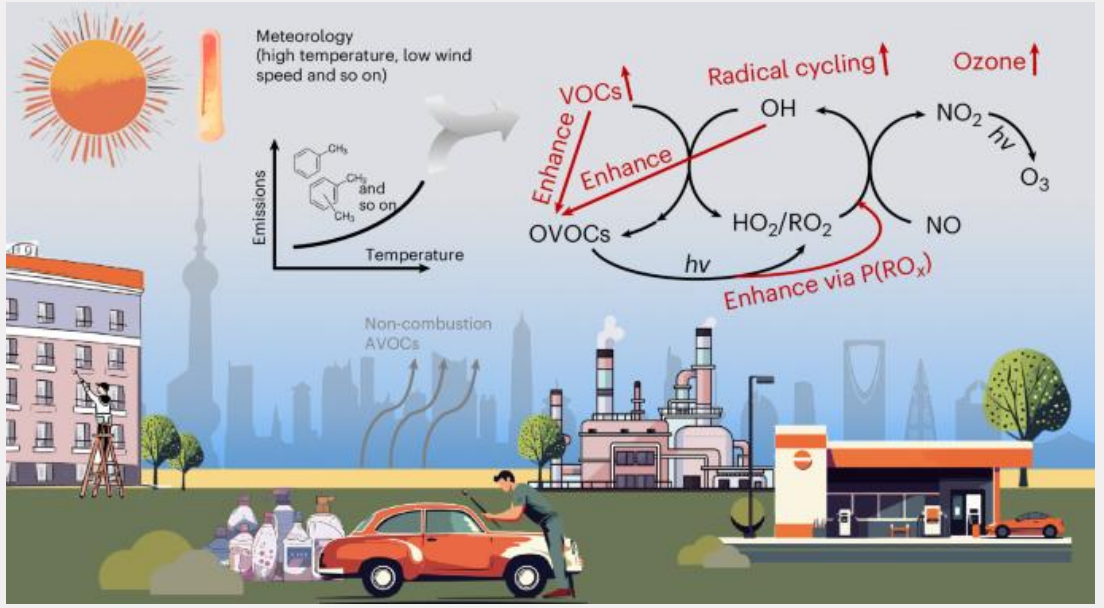


Waste Heat Drives Ozone Formation

The relationship between temperature and summertime ozone is approximately linear

Chemical reactions proceed faster at higher temperatures

Project Jupiter expected to release as much heat every day as 6 atomic bombs; could increase ozone levels by ~3.4 parts per billion

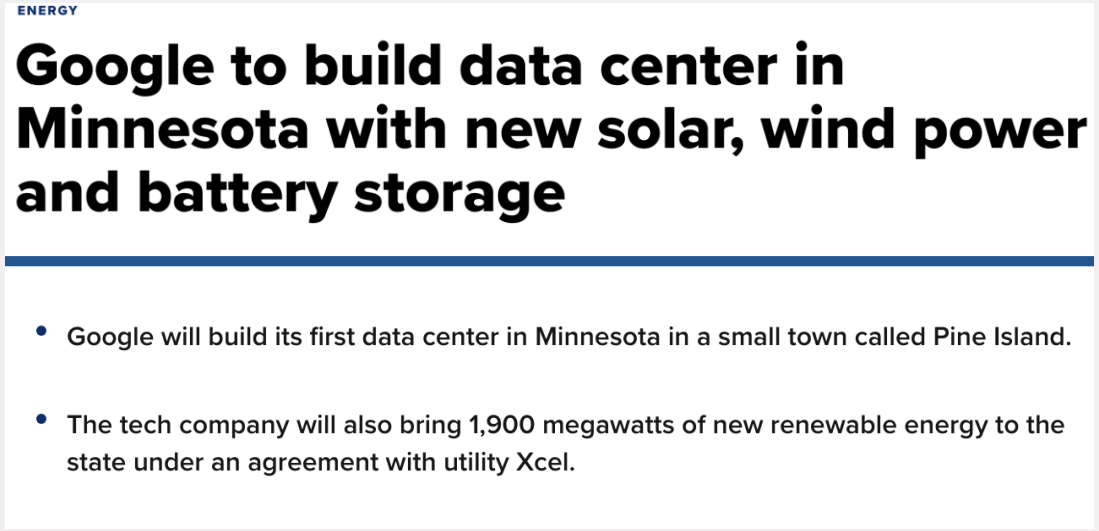


Companies Can Build Large Data Centers with Renewables

Los Lunas / Meta:

- 885MW of solar and wind
- 100MW of battery storage
- 150MW of advanced geothermal

Companies Can Build Large Data Centers with Renewables



ENERGY

Google to build data center in Minnesota with new solar, wind power and battery storage

- Google will build its first data center in Minnesota in a small town called Pine Island.
- The tech company will also bring 1,900 megawatts of new renewable energy to the state under an agreement with utility Xcel.

DIVE BRIEF

Meta to power Texas data centers with 600-MW solar plant

The facility's owner, Enbridge, will invest $900 million to finish the power plant near San Antonio.

Published July 24, 2025

Lamar Johnson
Reporter

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Other examples:

- Eagle Mountain Meta Campus in Utah (over 800 MW)
- Switch Citadel in Nevada (650 MW)

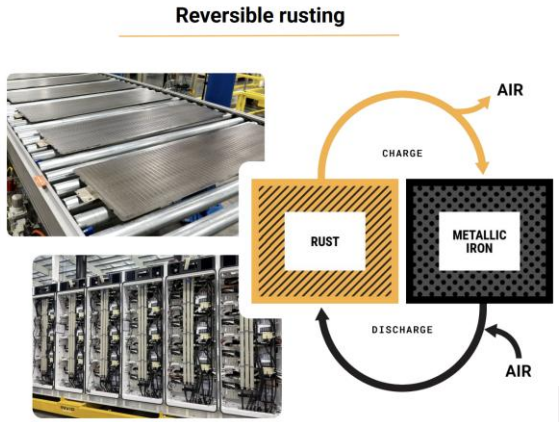
With Long-Term Energy Storage, Intermittency is Not a Barrier

CANARY MEDIA

Gigantic Form Energy battery to power Google data center in Minnesota

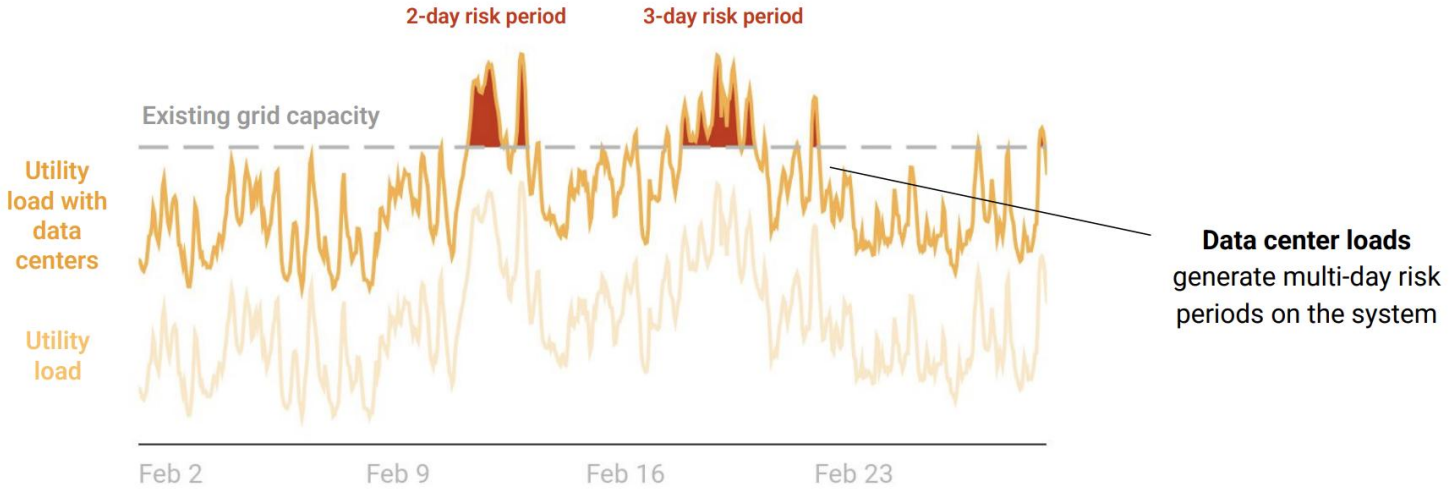
The startup has struck a deal with Xcel Energy to build a 30 gigawatt-hour battery plant that will deliver clean energy, round the clock, to a Google facility.

By **Julian Spector**
24 February 2026



Form energy

Long-duration, multi-day storage delivers the grid flexibility needed to unlock data center growth



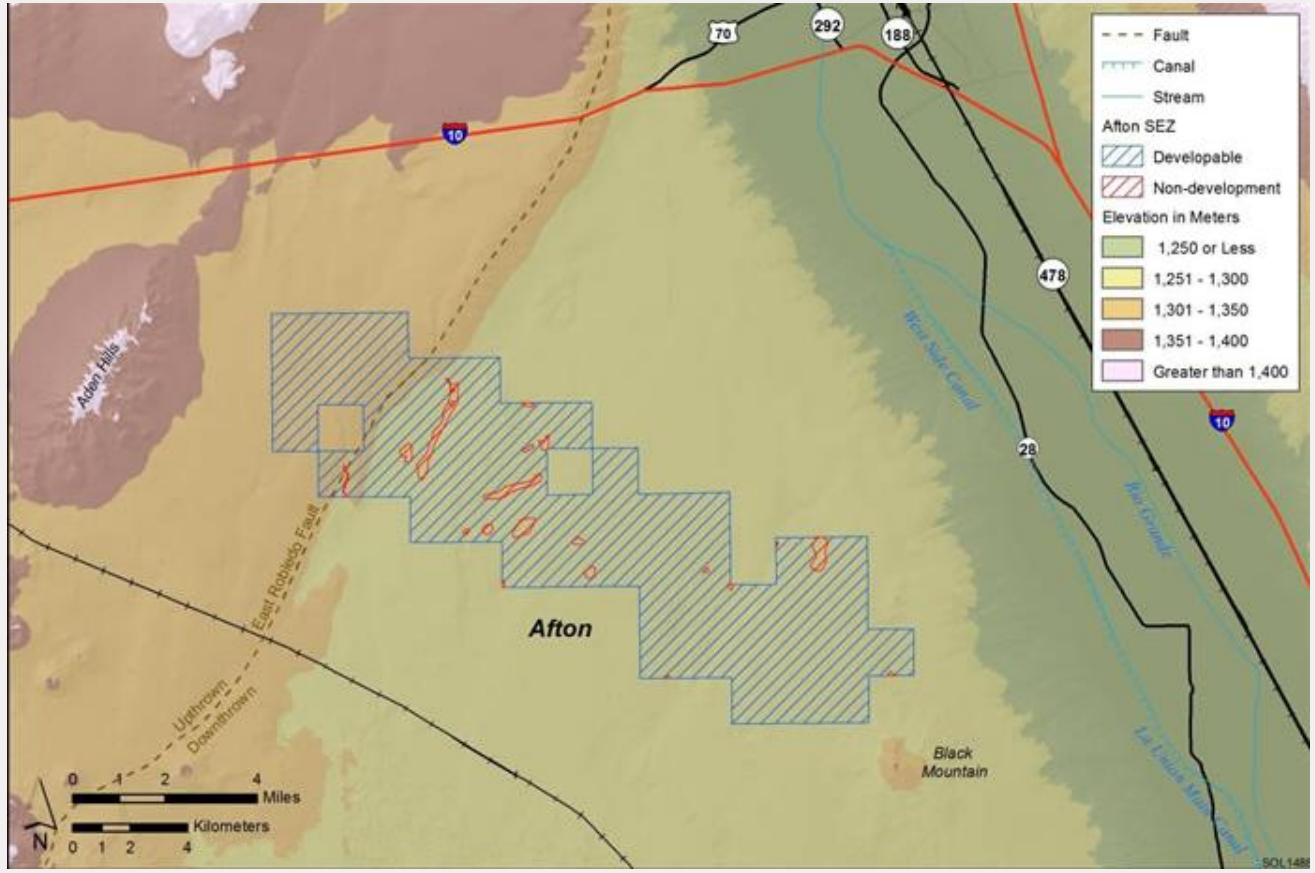
Case study based on real operational data from large WECC utility from February 2025

Form energy

https://www.nmlegis.gov/handouts/WNR%20071326%20Item%202%20FE%20Battery%20Energy%20Storage%20Systems.pdf , cited with permission

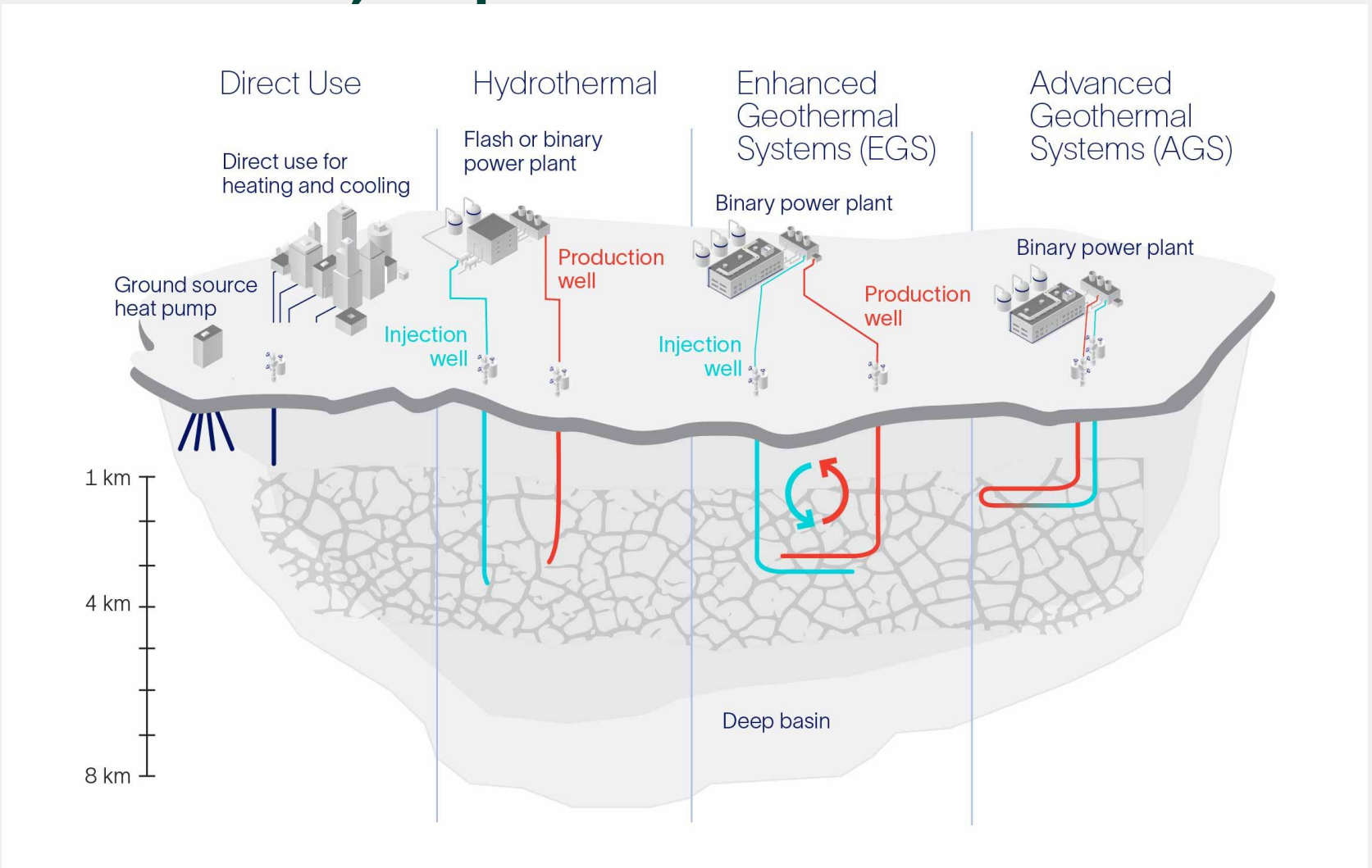
Slide created by, and used with permission of, Phil Simpson, Las Cruces-based electrical engineer

Project Jupiter Can Meet ETA Targets with Solar



Project Jupiter is roughly 20 miles from BLM Afton Solar Energy Zone, 46.8 square miles designated for solar development. The SEZ sits along a major interstate transmission line (although upgrades may be needed for the massive energy consumption of the data center)

New Mexico's Rich Geothermal Resources Provide 100% Clean, Dispatchable Power



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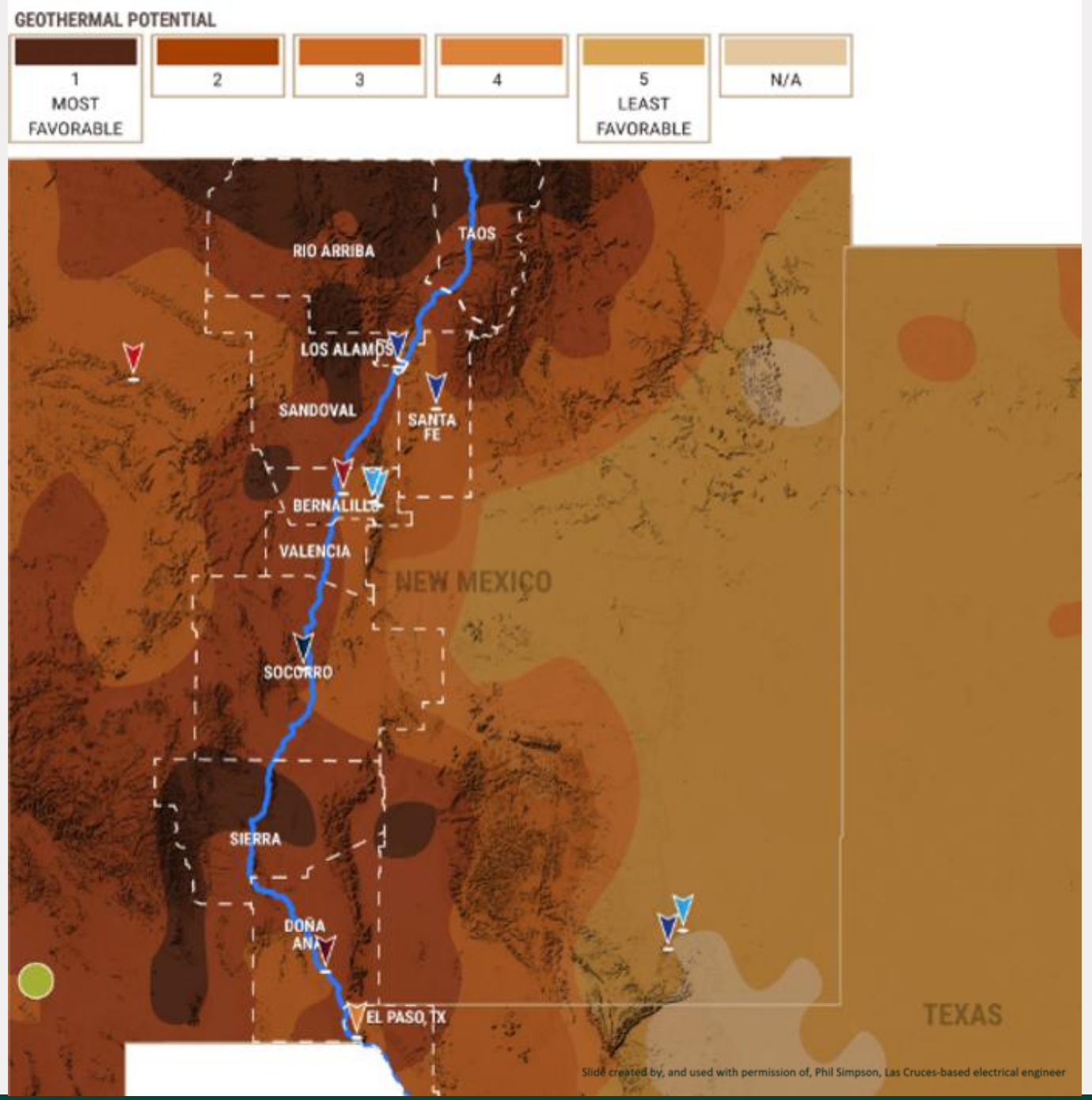
GEOTHERMAL POTENTIAL
1
MOST
FAVORABLE
2
3
4
5
LEAST
FAVORABLE
N/A
RIO ARRIBA
TAOS
LOS ALAMOS
SANDOVAL
SANTA
FE
BERNALILLO
VALENCIA
NEW MEXICO
SOCORRO
SIERRA
DOÑA
ANA
EL PASO, TX
TEXAS
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Their Urgency is Not Our Emergency

Source NM

https://sourcenm.com/2026/07/31/hearing-for-project-jupiter-data-centers-air-quality-permit-application-rescheduled-to-september/

"An attorney representing Project Jupiter developer Yucca Growth Infrastructure … said her client would stand to lose **$325 million per month**, beginning in November" if fossil-fuel power plant not approved.

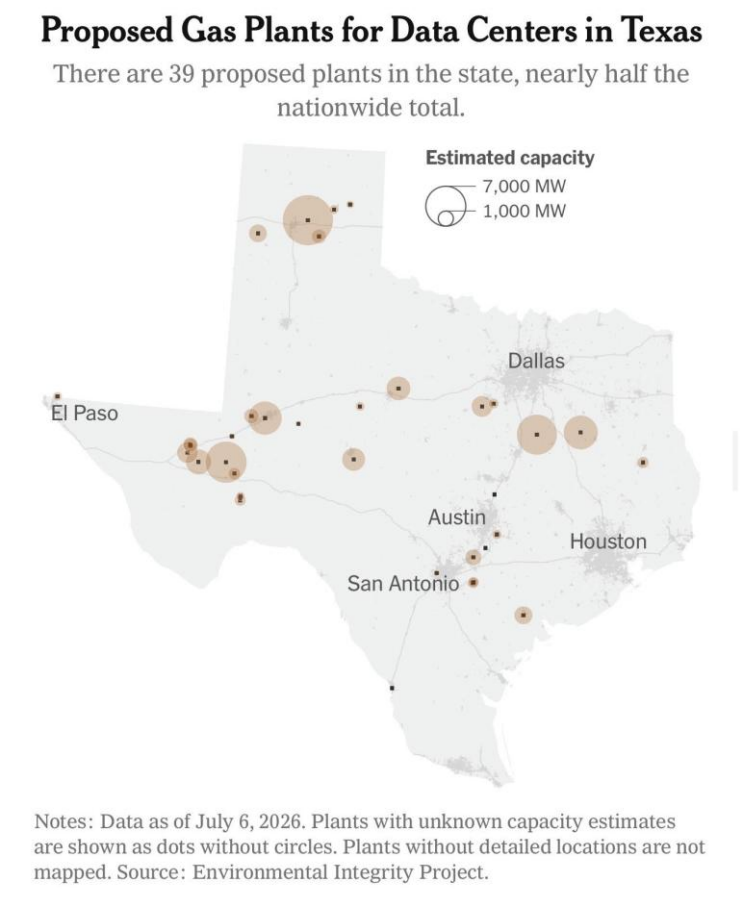
$325 million can buy a LOT of solar panels and batteries

Their Urgency is Not Our Emergency

Ultra-short term profit considerations, NOT technical reliability or even long-term economics, are driving industry thinking

Locking in infrastructure that will pollute for decades, for a few extra quarters of corporate profit, is NOT a good deal for New Mexico

At the Same Time, We Have to Be Aware of What is Happening Next Door



- There is a tremendous amount of money floating around in this industry
- What can we do to direct that money towards investment in **next-generation clean energy technology**?

Guardrails are Needed

- **Reaffirm** commitment to clean energy, climate targets
- Provide comprehensive **planning framework**, including all relevant agencies to identify which energy solutions we want and where they are viable / appropriate
- Ensure that utility rates **protect existing ratepayers** from the extra costs incurred to serve and connect data centers
- Make sure benefits flow to New Mexicans, including **addressing energy poverty** in ribal and rural areas

Ensuring that New Mexico's Clean Energy Laws Apply to Data Centers

The **Energy Transition Act** (ETA) requires ***utilities*** to achieve 100% zero-carbon power in New Mexico by 2045

Hyperscale data centers were unheard of in 2019, so ETA did not apply to ***self-sourced generation*** ("microgrids")

- The **Microgrid Oversight Act** (SB235) would extend the ETA's renewable energy standards to microgrids exceeding 20 MW
- Passed Senate but not brought to vote in House

Restoring NMED Permitting Authority

In 2013, the U.S. Supreme Court overturned Obama-era rule that required more stringent review before construction of large GHG sources

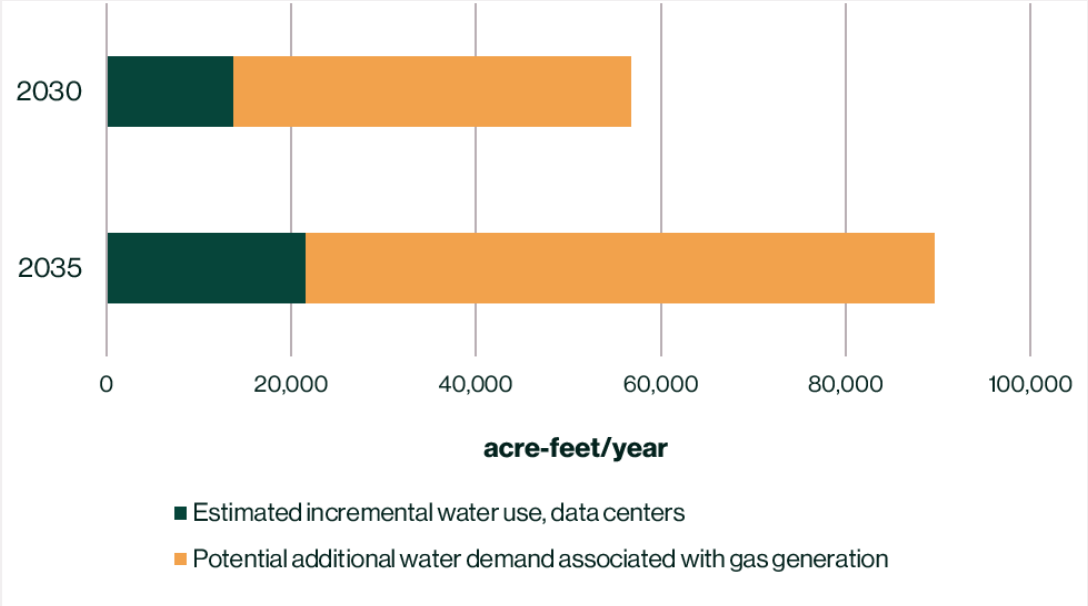
NMED could restore the rule, providing more oversight of data center emissions

20.2.74.7(AZ)(5) NMAC says: "beginning July 1, 2011 ... the pollutant GHGs shall also be subject to regulation: (a) at a new stationary source that will emit or have the potential to emit 100,000 tons per year CO_2e“

All we need to do is strike subsection (AZ)(6), which says (AZ)(5) is unenforceable EPA rule is struck down in court

Other Impacts to Consider

- Water use
- Land and habitat
- Ratepayer impacts



For more information:
https://westernresourceadvocates.org/publications/data-center-impacts-in-the-west-policy-solutions-for-water-and-energy-use

Questions?

Western Resource Advocates