

JUNE 14, 2023

SIKESTON BMU OPEN HOUSE



SIKESTON POWER HISTORY AND VISION

- Nearly 50 years ago, the leaders of Sikeston and the community came together to address the city's future power needs.
- The result of that effort was construction of the 235 MW coal-fired Sikeston Power Station, which began commercial operation in 1981.

SIKESTON POWER HISTORY AND VISION

- Sikeston Power Station (SPS) serves Sikeston (45 MW) including two large industrial-load centers:
 - Unilever (9 MW)
 - Alan Wire (3 MW)

As well as four surrounding municipalities:

- Columbia (66 MW)
- Fulton (11 MW)
- West Plains (18 MW)
- Carthage (23 MW)

The balance is provided to the Missouri Public Utility Association (MPUA) (40 MW) and the balance (32 MW) is available for spot sales.

- The Sikeston Power Station currently employs about 70 people and provides our community with reliable, low cost power.

SIKESTON POWER HISTORY AND VISION

- Today, the community of Sikeston is **coming together again to address the next 50 years of power** for the community.
- The Board knows how important **low-cost, reliable power** is to the community. Our rate payers, businesses and employers, and our neighbors have all benefited from the investment our community decided to make nearly 50 years ago.
- At this point in every power plants' life cycle - **more than 40 years of operations** - review of its status and future is necessary.
- We live during a time where the world is undergoing an energy transformation and this impacts the energy economics of community, including Sikeston.
- As we confront the mounting challenges of operating the Power Station, we owe it to our community to look forward, do the analysis, and consider what options might be available to continue to support low-cost, reliable electricity for the community.
- The first step in addressing the challenges that we are facing is **to engage in Integrated Resource Plan**. This has been initiated and the results are expected later this year.

SIKESTON BMU (SBMU) BOARD OBJECTIVES

- Minimize Customer Rates and Preserve Rate Stability
- Preserve Reliability of Service
- Serve Current and Future Energy, Industry, and Infrastructure Needs
- Ensure Technology for Consumer Benefit
- Maintain control of SBMU future efforts and opportunities

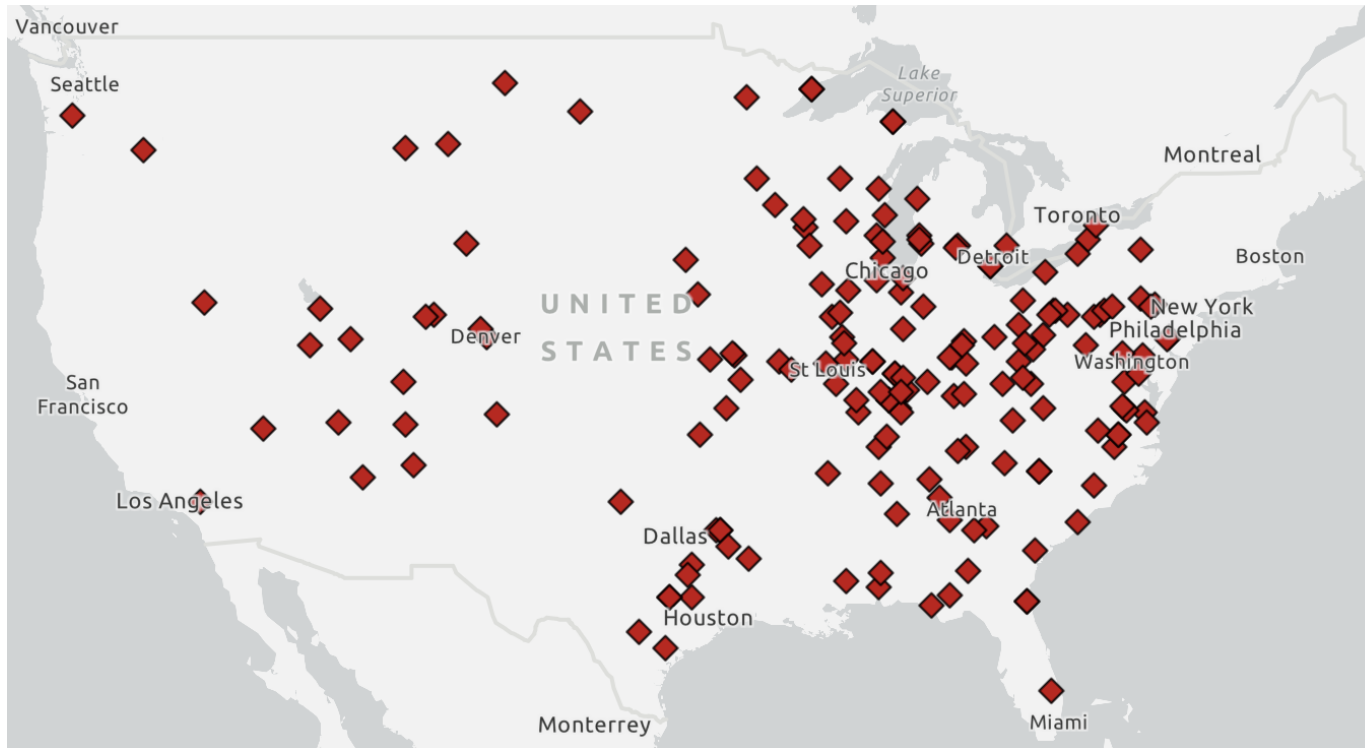
US COAL PLANT RETIREMENTS (2012 – 2030)

- Due to continued competition from natural gas and renewable resources, **23% of the current coal-fired capacity** (~200 GW) operating in the United States **has reported plans to retire by the end of the decade.**
- Coal-fired generators face **higher operating and maintenance costs**, which make them less competitive and more likely to retire.
- Some coal-fired power plants must comply with regulations limiting the discharge of wastewater by 2028, which would **require additional capital investments**, likely influencing the decision to retire some of these coal-fired units.

Other factors impacting retirement decisions include:

- More stringent seasonal emissions regulations recently enacted by the EPA will drive up compliance costs for some coal-fired plants such as Sikeston Power Station.
- Increased difficulty and costs of purchasing coal and delivering coal supply to plants.
- Rapidly declining appetite for lenders, insurance companies, and other investors to continue to underwrite coal plant operations.
- Increasing demand by customers to purchase cleaner energy from alternative resources.

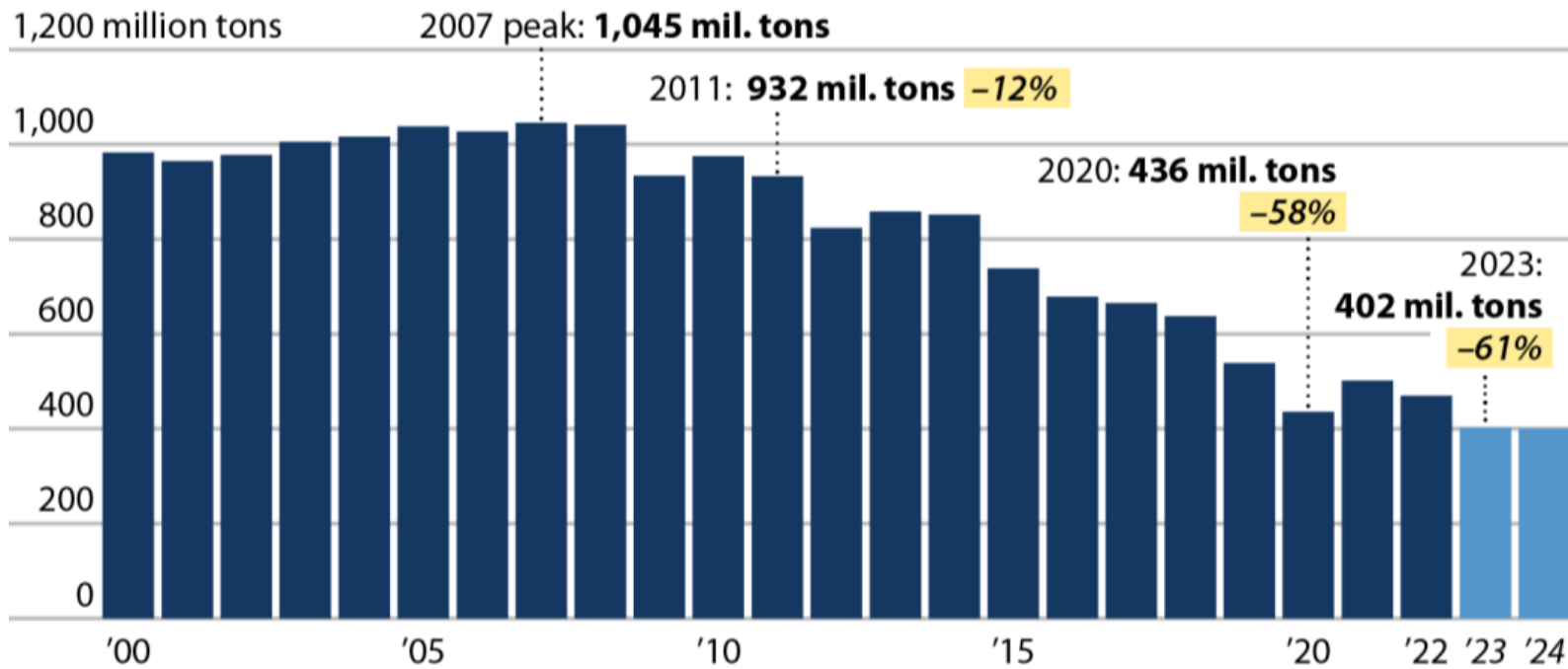
US COAL PLANT RETIREMENTS (2015 – 2030)



- **151 coal power plants** have already been retired
- **28 coal power plants** are currently planned to be retired by the end of the decade

US COAL CONSUMPTION BY THE US ELECTRIC POWER SECTOR

U.S. power generators used over a billion tons of coal in 2003 through 2008, but then started to cut back quickly. In 2023 and 2024, the EIA forecasts electric-sector coal use to fall to about 400 million tons.

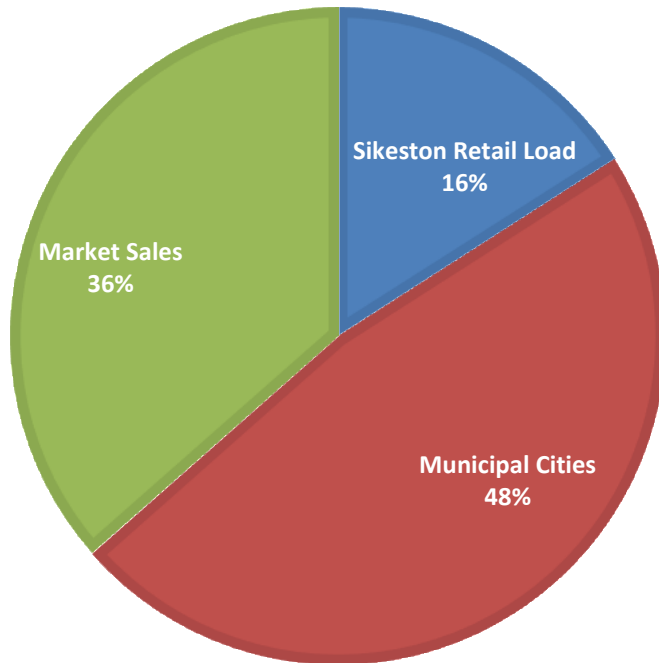


Source: EIA, 2023-24 figures from the March 2023 Short-Term Energy Outlook

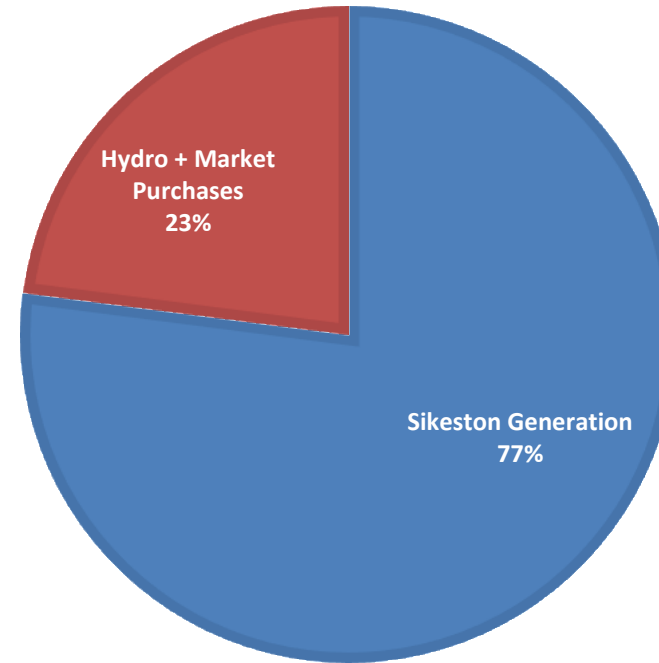
IEEFA

2022 GENERATION AND RETAIL LOAD MIX

**SIKESTON POWER STATION
2022 SALES BREAKDOWN**



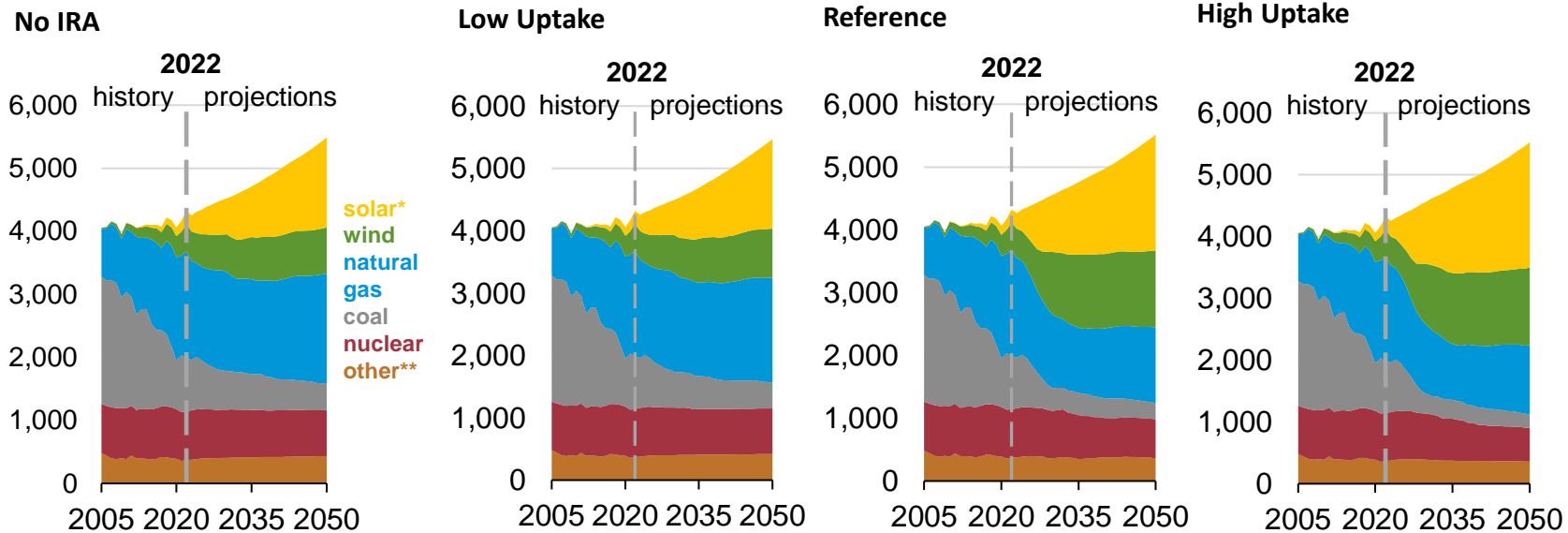
**SIKESTON RETAIL LOAD
2022 SUPPLY BREAKDOWN**



LONG TERM OUTLOOK FOR SOLAR AND WIND

Solar and wind will generate a majority of US electricity by 2050 in reference and high uptake cases.

U.S. net electricity generation by fuel
billion kilowatthours



Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2023* (AEO2023)

Note: IRA=Inflation Reduction Act

*Includes utility-scale and end-use photovoltaic generation and excludes off-grid photovoltaics.

**Includes petroleum, conventional hydroelectric power, geothermal, wood and other biomass, pumped storage, non-biogenic municipal waste in the electric power sector, refinery gas, still gas, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.



Solar Power



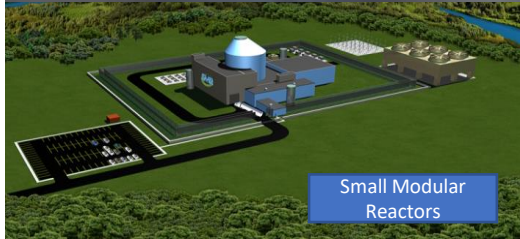
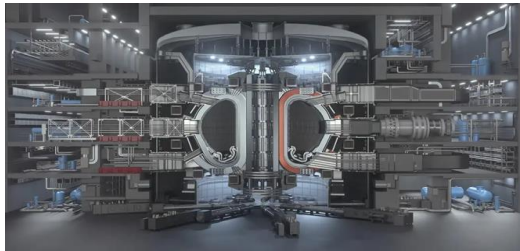
Natural Gas Combined Cycle



Natural Gas Peaker



Biogas Technology



Small Modular Reactors



Coal Generation



Hydrogen Production



Carbon Capture Technology

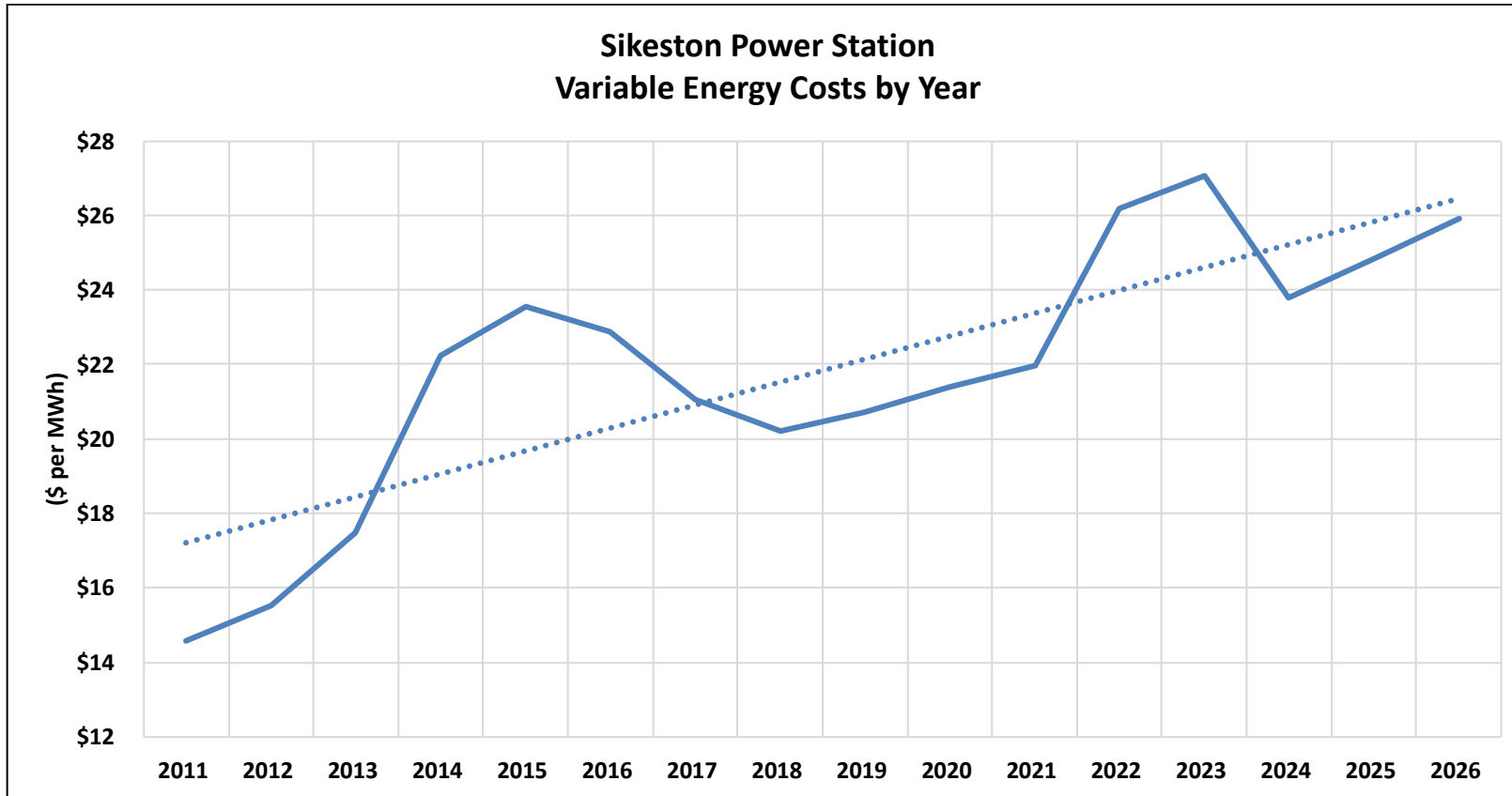


Energy Storage



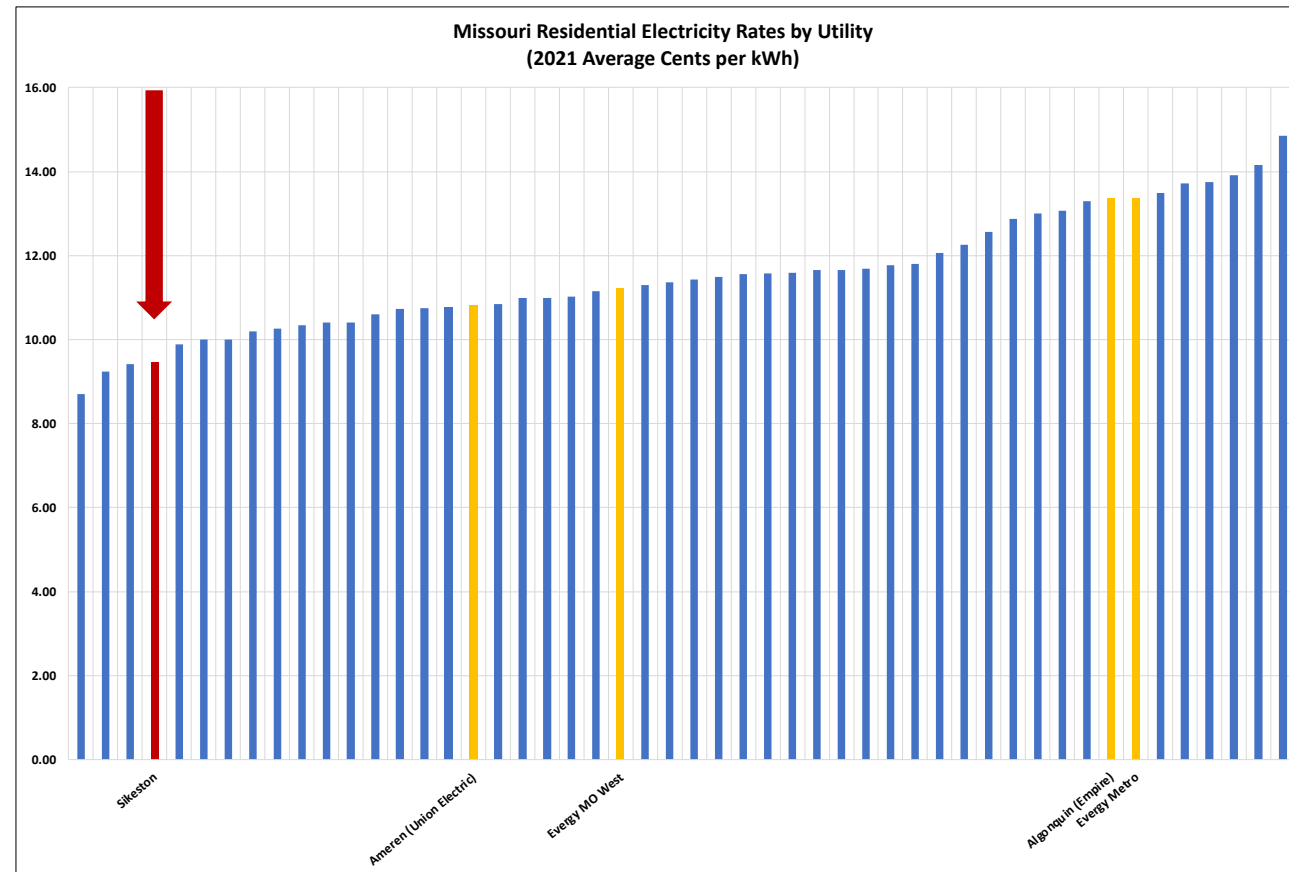
Wind Energy

VARIABLE COST TRENDS (ACTUAL + FORECAST)



ELECTRICITY RATE COMPARISONS BY MISSOURI UTILITY

RESIDENTIAL CUSTOMERS



THANK YOU FOR PARTICIPATING!

WE LOOK FORWARD TO COLLABORATING WITH THE RESIDENTS OF SIKESTON
TO ENSURE OUR ENERGY PROTECTION.

FOR QUESTIONS OR COMMENTS:
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