Just the Facts

Montana Data Center Electricity

Montana Chamber of Commerce
March 3, 2026

Bob Morris
Lance Energy Chair

MONTANA
TECHNOLOGICAL UNIVERSITY

Artificial Intelligence: a Bubble or a Trend?

The Rise of AI:

A Reality Check on Energy and Economic Impacts

Mark P. Mills
Executive Director, National Center for Energy Analytics
Distinguished Senior Fellow, Texas Public Policy Foundation
Distinguished Fellow, Hamm Institute for American Energy

A RESEARCH PARTNERSHIP BETWEEN:

The National Center for Energy Analytics
https://energyanalytics.org

The Hamm Institute for American Energy
https://hamminstitute.org

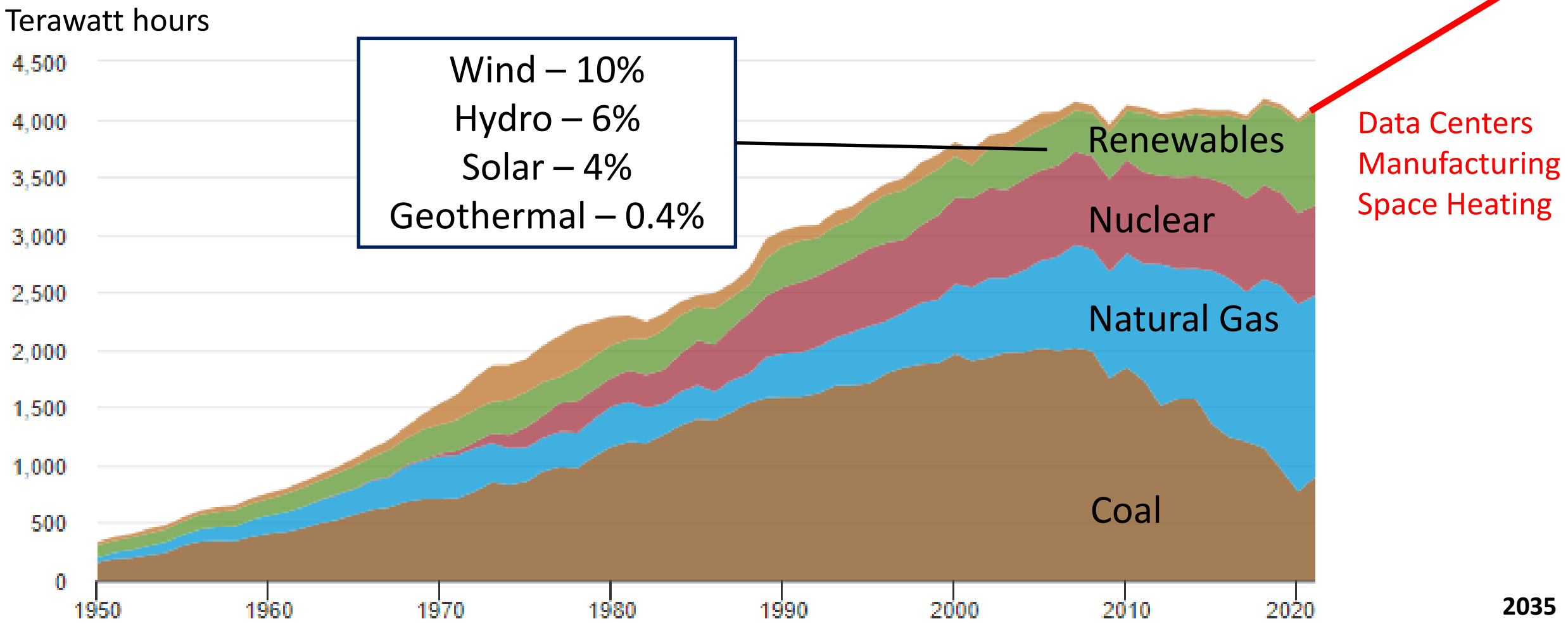
NATIONAL CENTER FOR ENERGY ANALYTICS

Hamm Institute for American Energy
OKLAHOMA STATE UNIVERSITY

- Annual spend $1T…$2T
- Private capital
- ~5% of GDP
- Interstate Highway or Chemical Industry
- Productivity (GDP) Boost: 1% -> 4%
- National Security

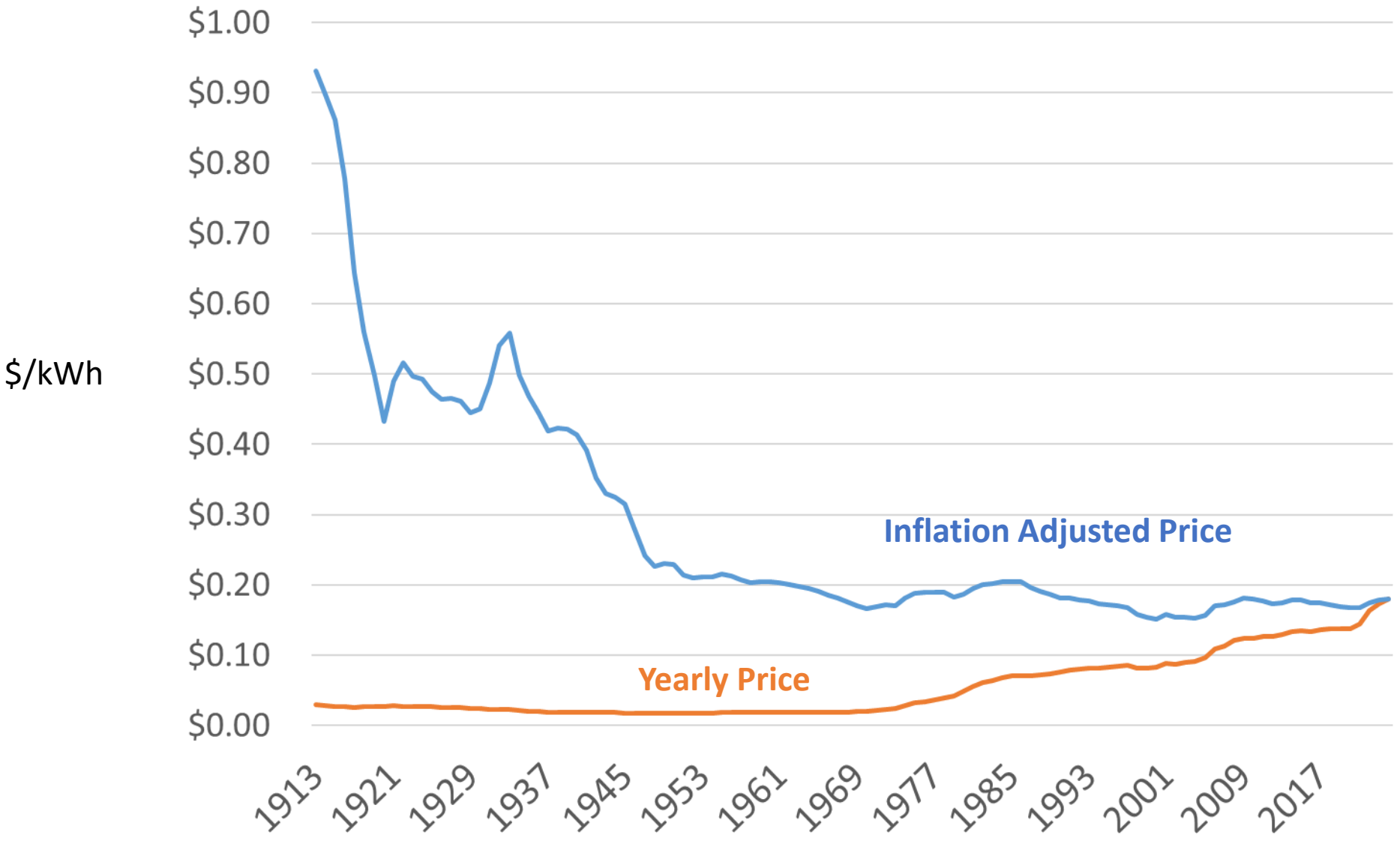
U.S. Electrical Energy Mix is Changing

Cheaper, Cleaner Natural Gas Dominates US Production



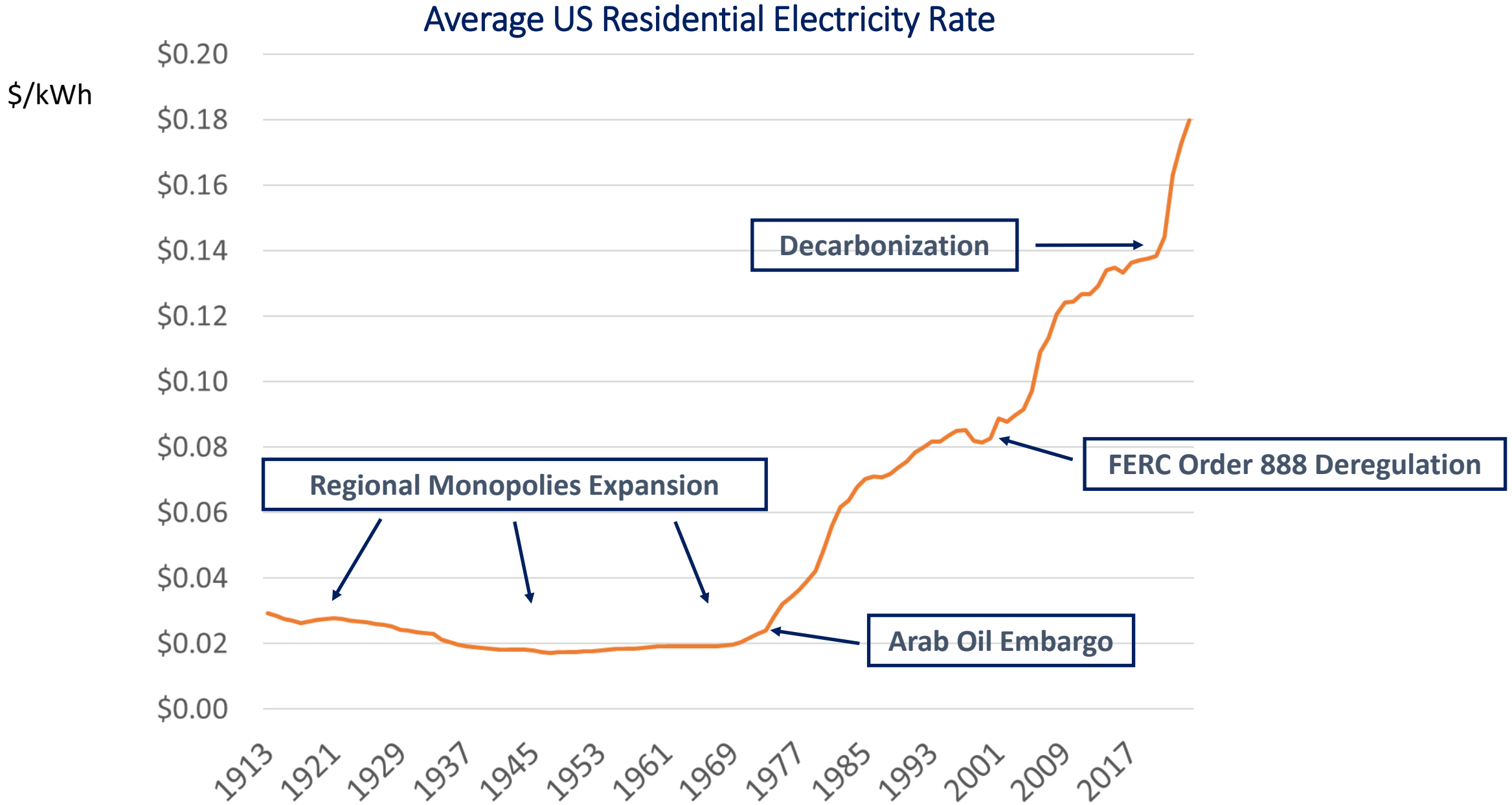
U.S. Energy Information Administration, *Electric Power Monthly*, February 2024; preliminary data

Public Service Companies Reduce Prices for a Century



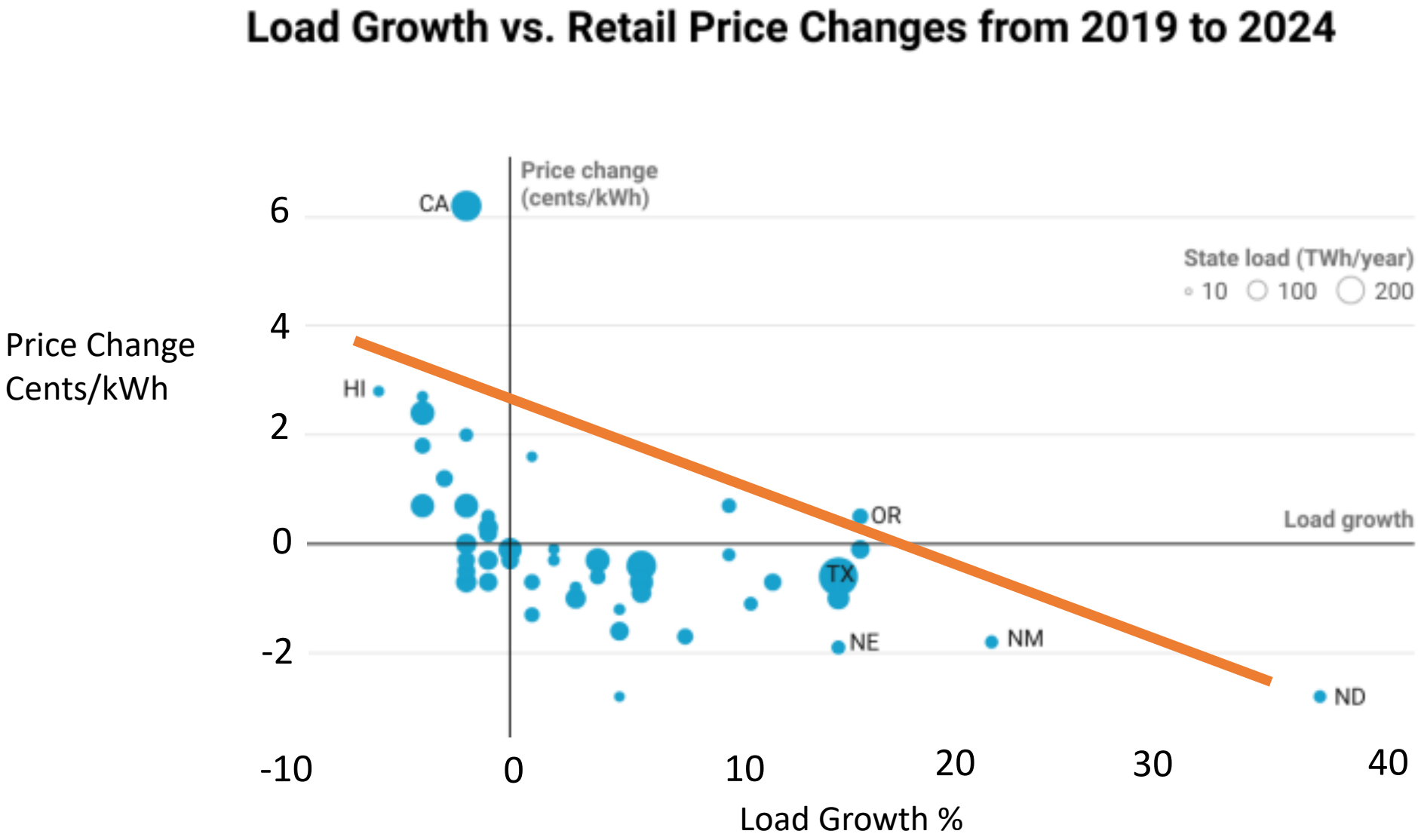
Sources: US Bureau of Labor Statistics; www.in2013dollars.com/electricity/price-inflation

Engineering, Economics, and Politics Drive US Electricity Prices



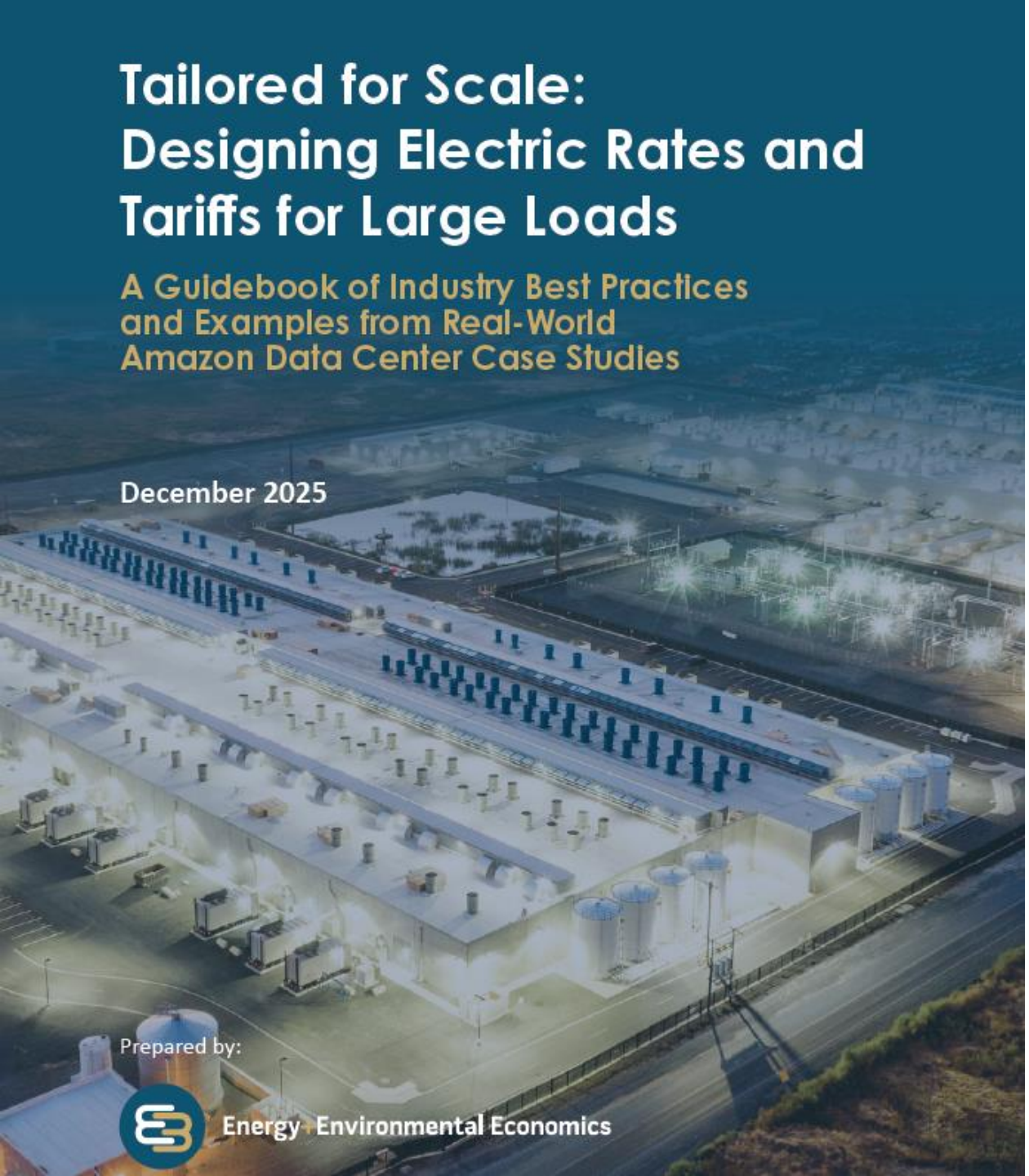
Sources: US Bureau of Labor Statistics; www.in2013dollars.com/electricity/price-inflation

Load Growth Reduces Retail Electricity Prices



Price Change Cents/kWh

Factors Influencing Recent Trends in Retail Electricity Prices in the United States: Lawrence Berkeley National Laboratory & The Brattle Group, October 2025



Data Centers Benefit Ratepayers, Communities, and the Environment

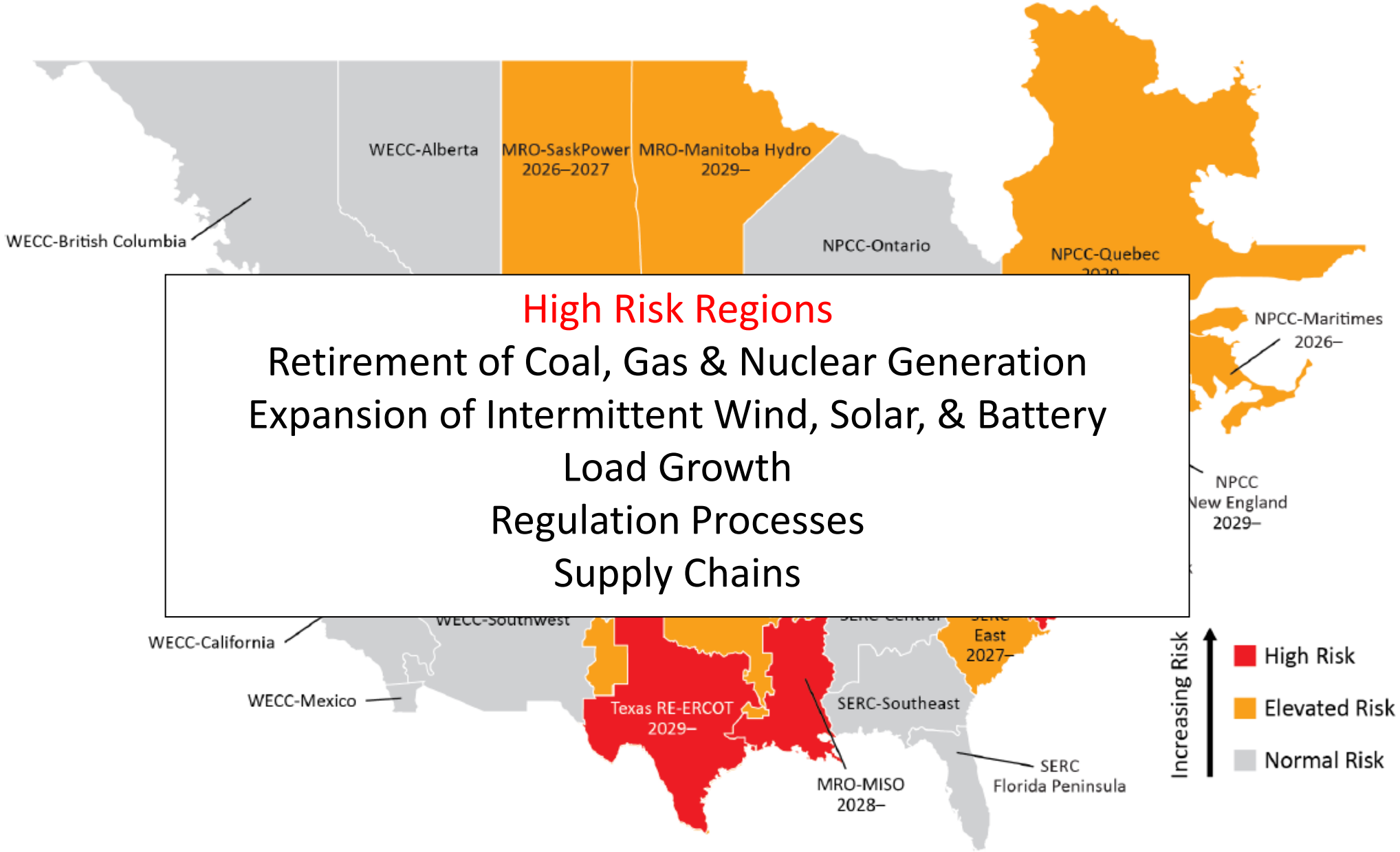
Driving Load Growth: Data centers are a major source of new U.S. electricity demand and grid investment after decades of flat growth.

No Cost Shift: They pay full cost to serve and can lower rates through surplus revenue.

Investment & Jobs: Large loads accelerate grid upgrades and economic development.

Clean Energy & Innovation: Support renewables and emerging technologies; rate design and regulation is evolving.

NERC Assesses Electrical Supply Risks



NERC 2025 Long Term Reliability Assessment

Resource Adequacy and the Energy Transition in the Pacific Northwest: Phase 1 Results

Washington Utilities and Transportation Commission
Washington Department of Commerce

Resource Adequacy Meeting, RCW 19.280.065, Docket UE-210096

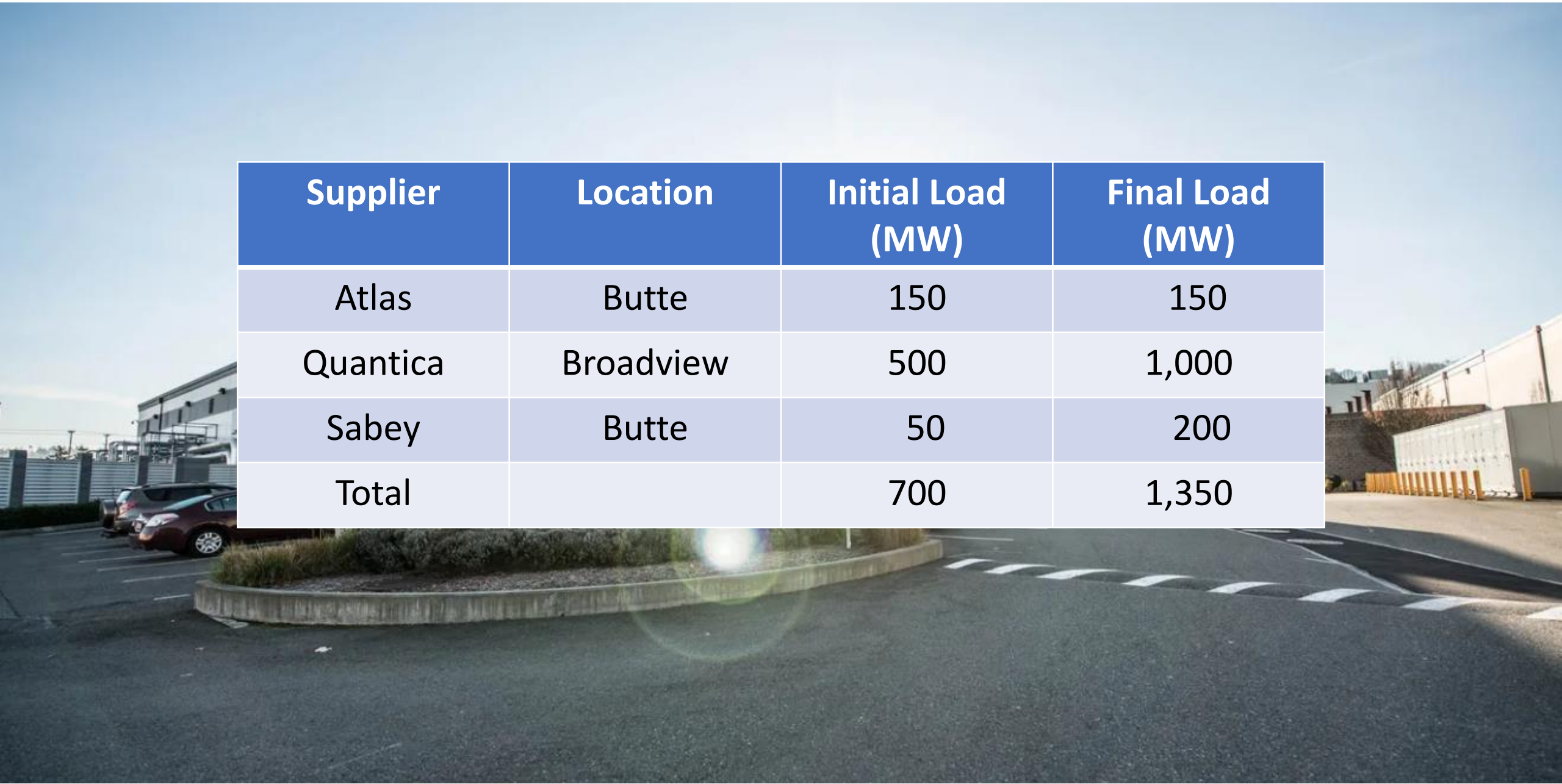
September 22, 2025

Lacey, Washington

Energy+Environmental Economics

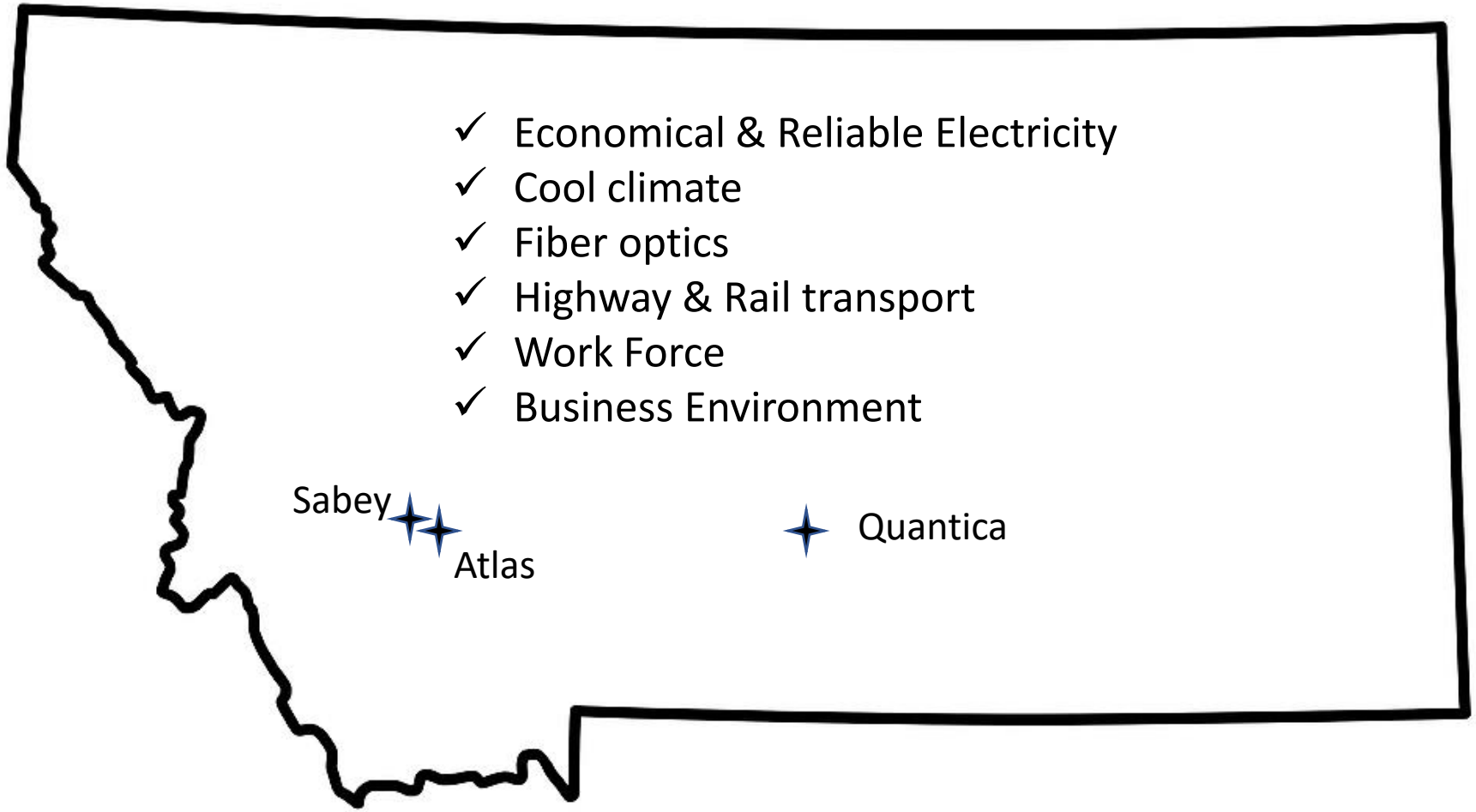
- Load growth and generation retirements create a 9GW resource gap by 2030
- Preferred wind, solar, and battery resources make only small contributions
- Natural gas is the only viable near-term firm capacity option

Proposed Data Center Expansions

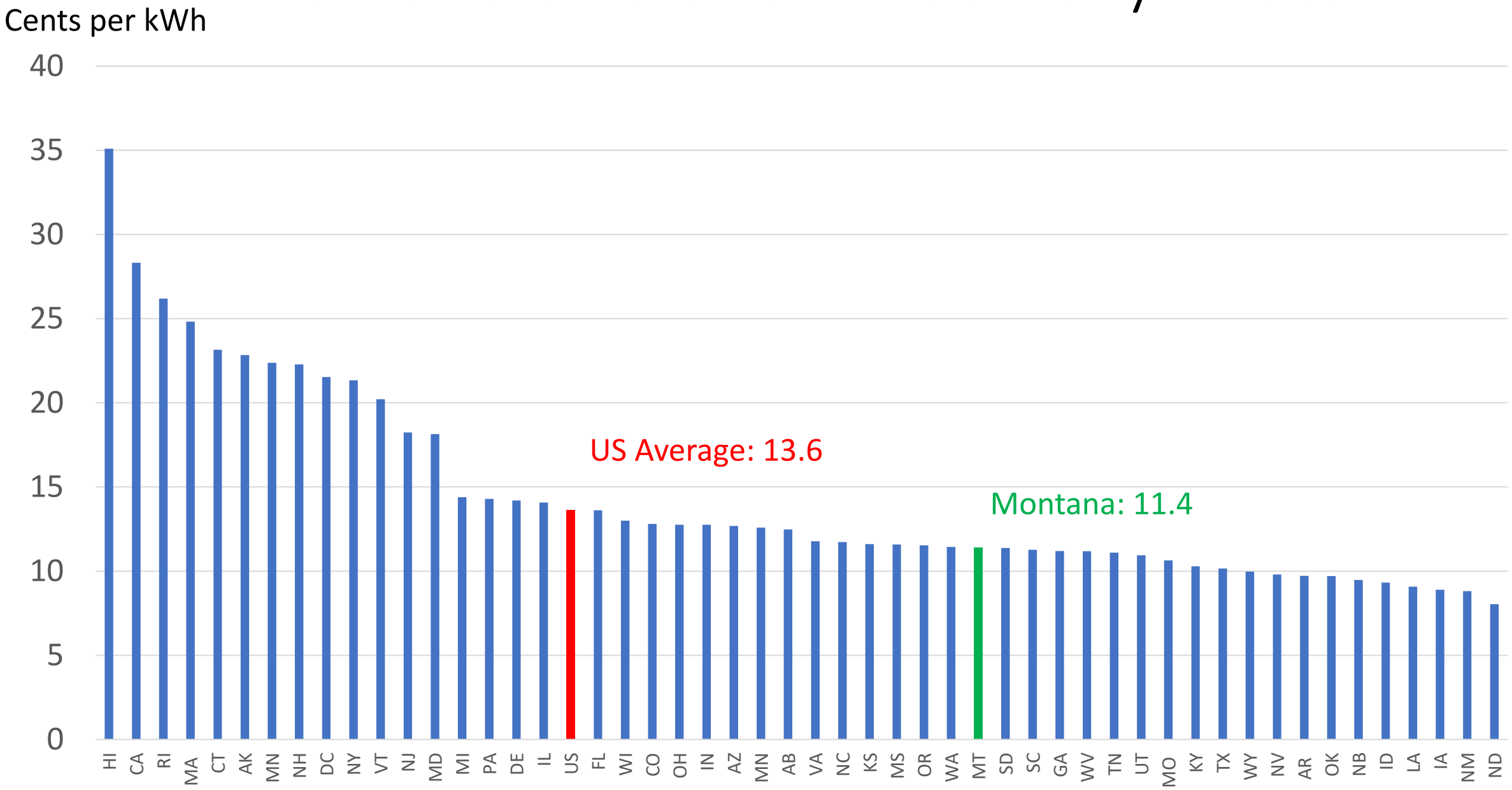


Supplier	Location	Initial Load (MW)	Final Load (MW)
Atlas	Butte	150	150
Quantica	Broadview	500	1,000
Sabey	Butte	50	200
Total		700	1,350

Why Data Centers in Montana?

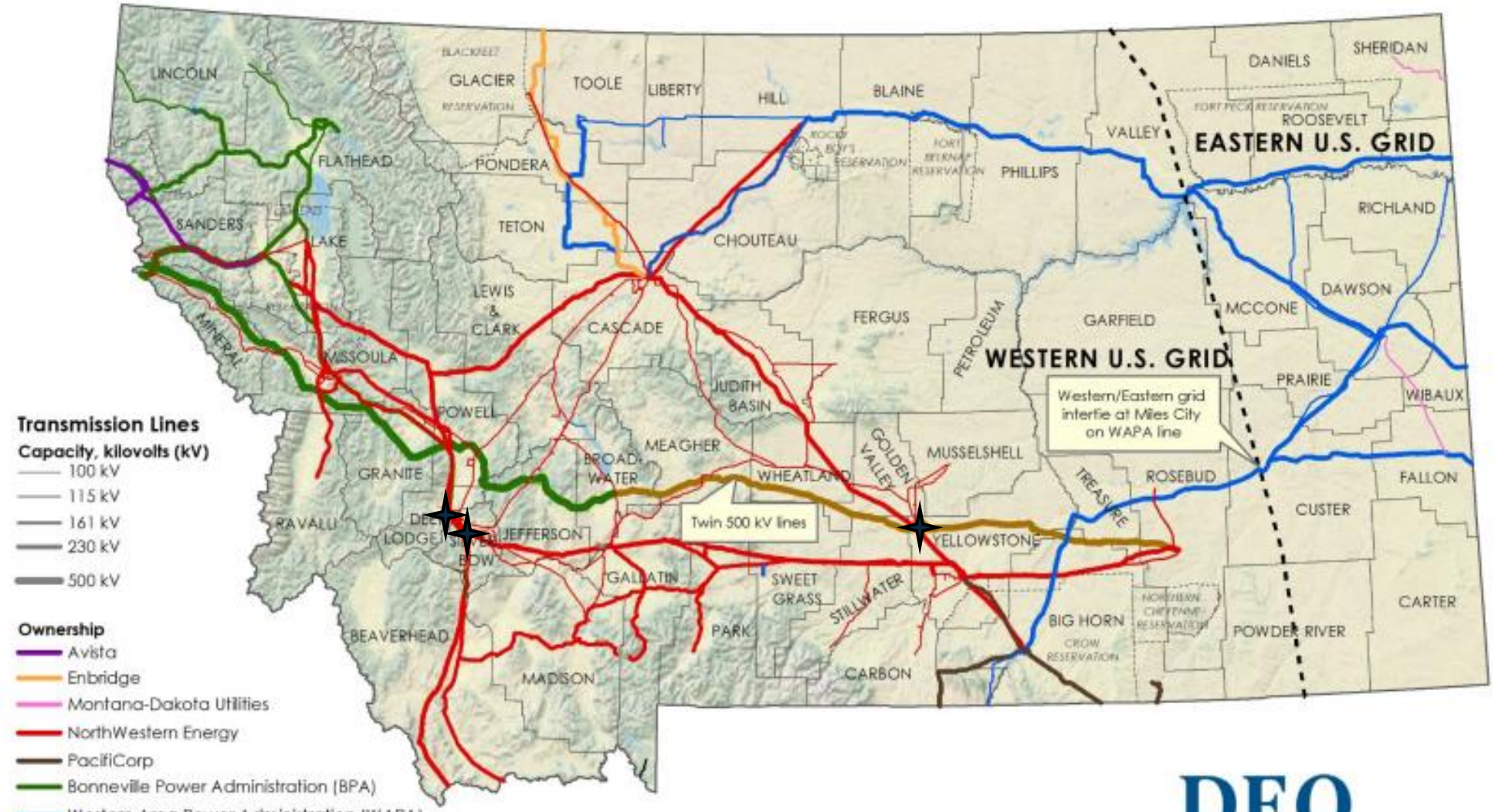


Montana Offers Low Electricity Prices



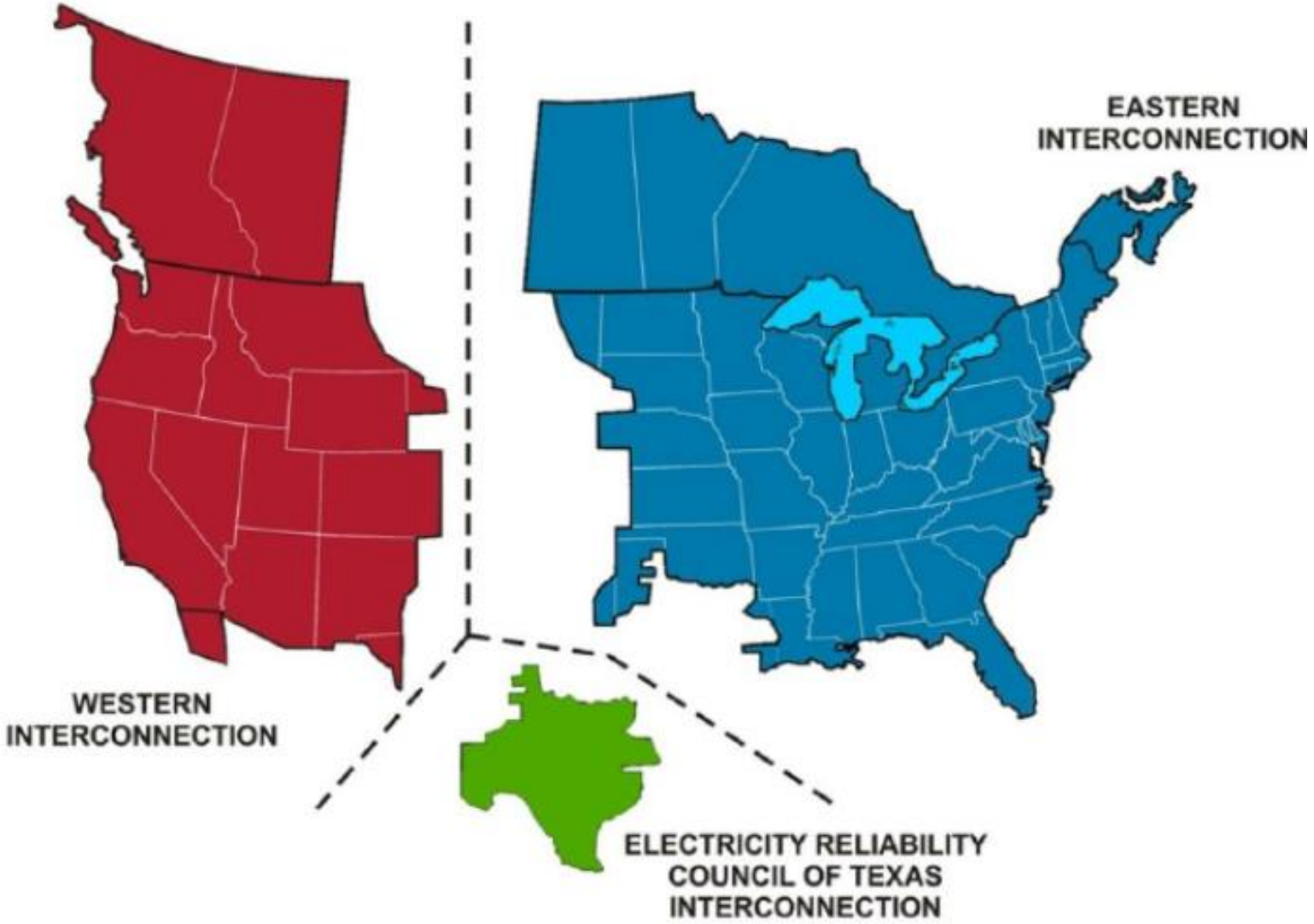
EIA October 2025

MT Transmission Network is a Strategic Regional Asset



DEQ MONTANA ENERGY OFFICE

U.S. “Grid” is Three Networks



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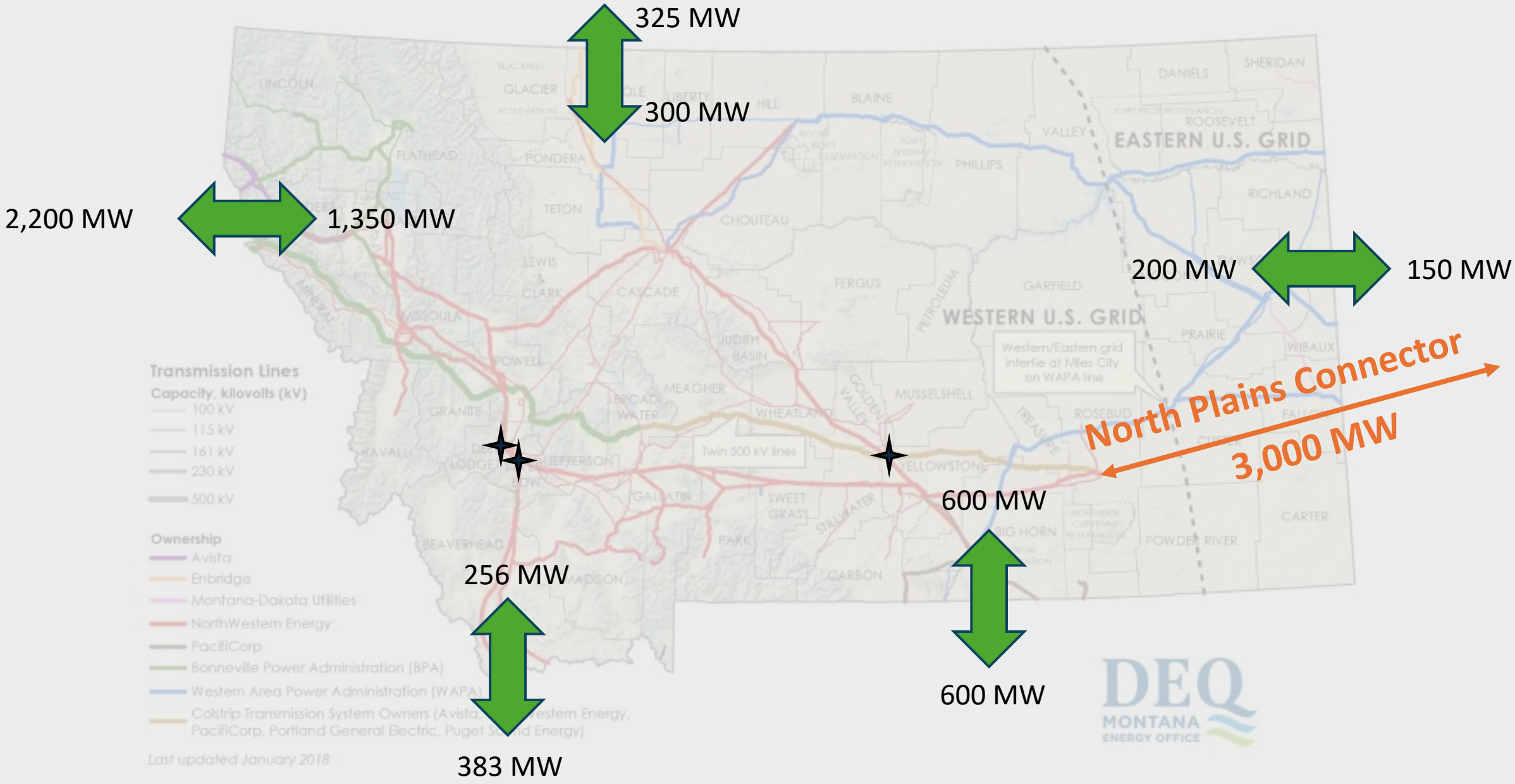
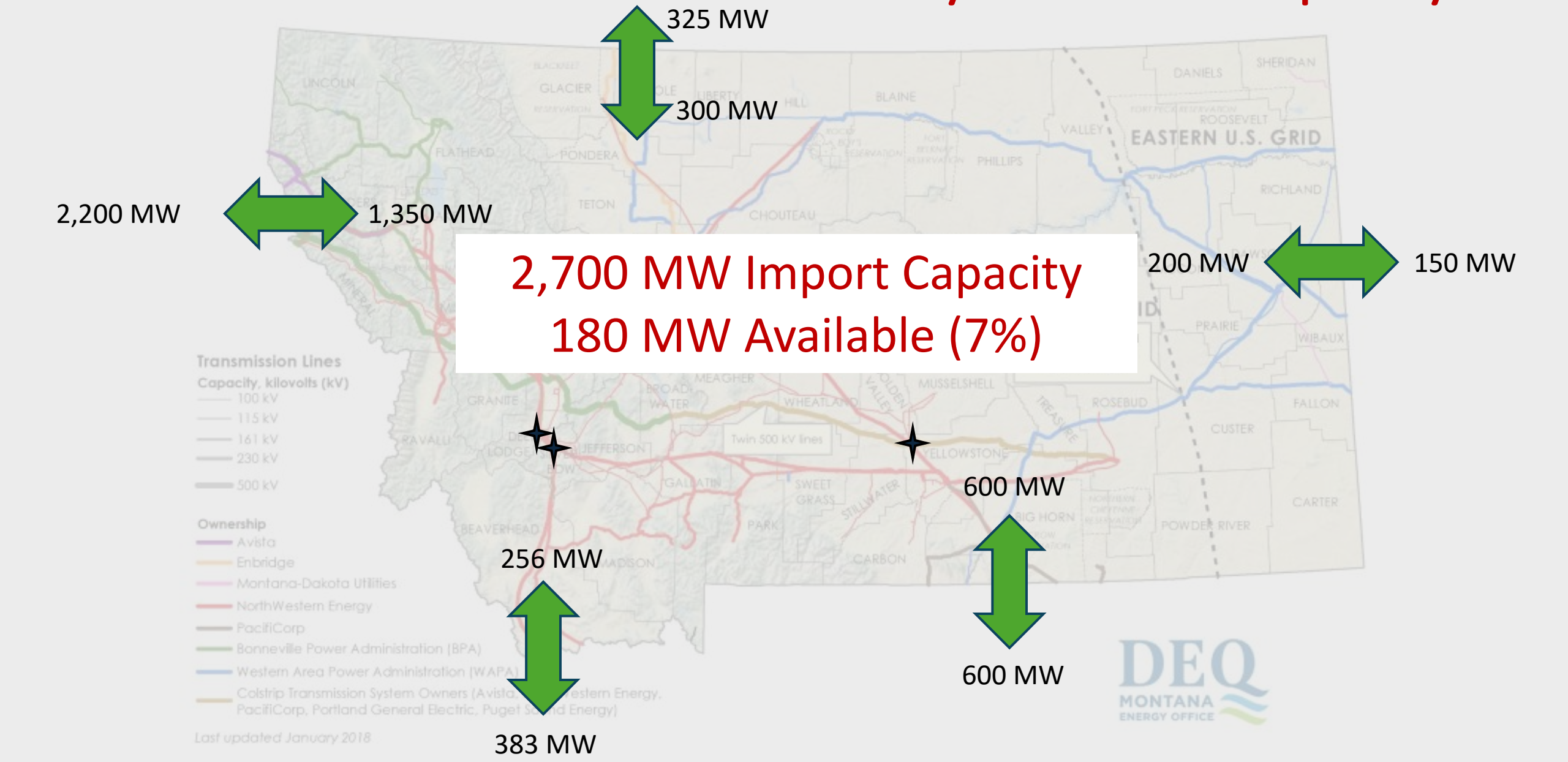


Northwestern Energy 2023 Integrated Resource Plan

Montana Electric Transmission System is At Capacity



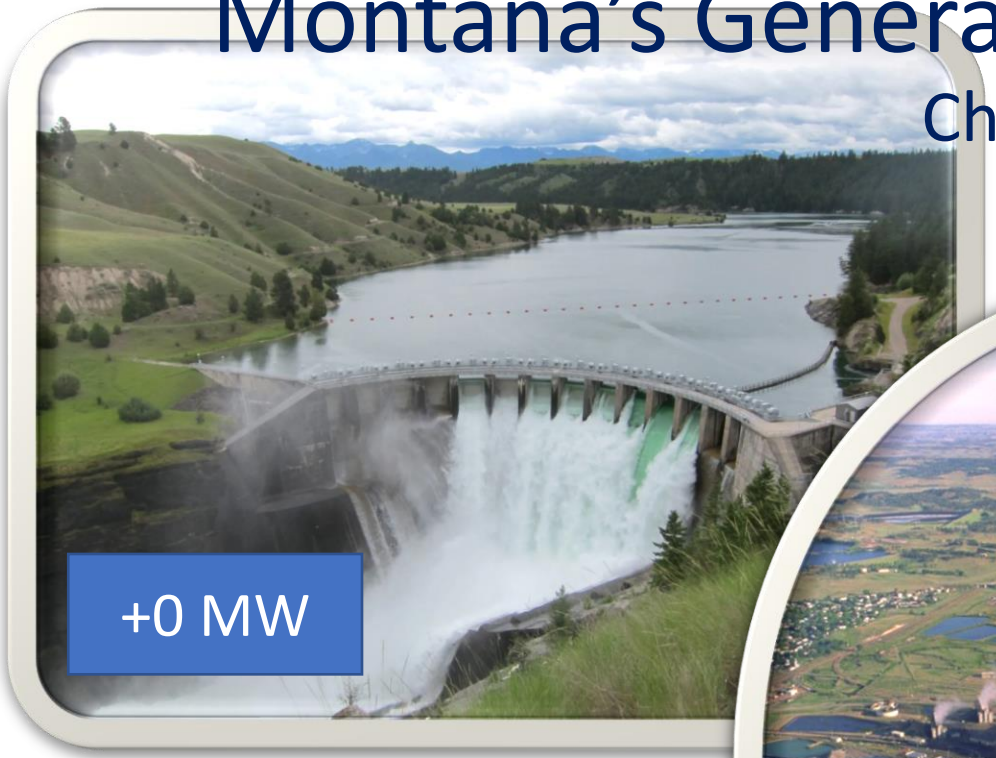
Northwestern Energy 2026 Montana IRP (DRAFT) : Montana Legislature ETIC Committee Meeting Materials

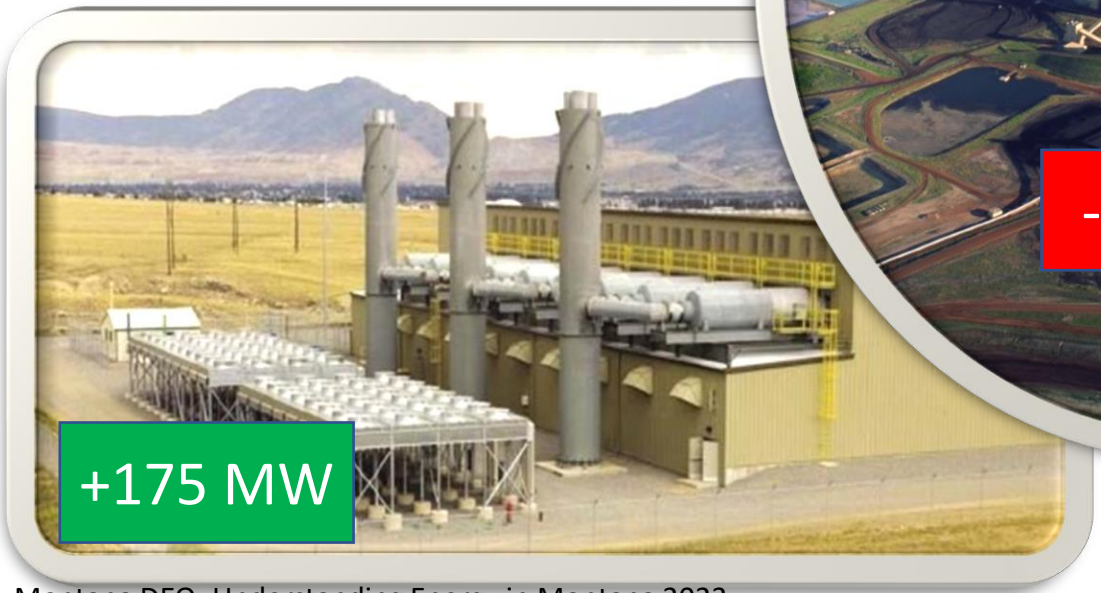
Coal, Hydro and Wind: Montana's Key Electricity Sources

EIA via https://lowcarbonpower.org/region/Montana

Montana's Generation Resources are Changing

Changes Since 2012

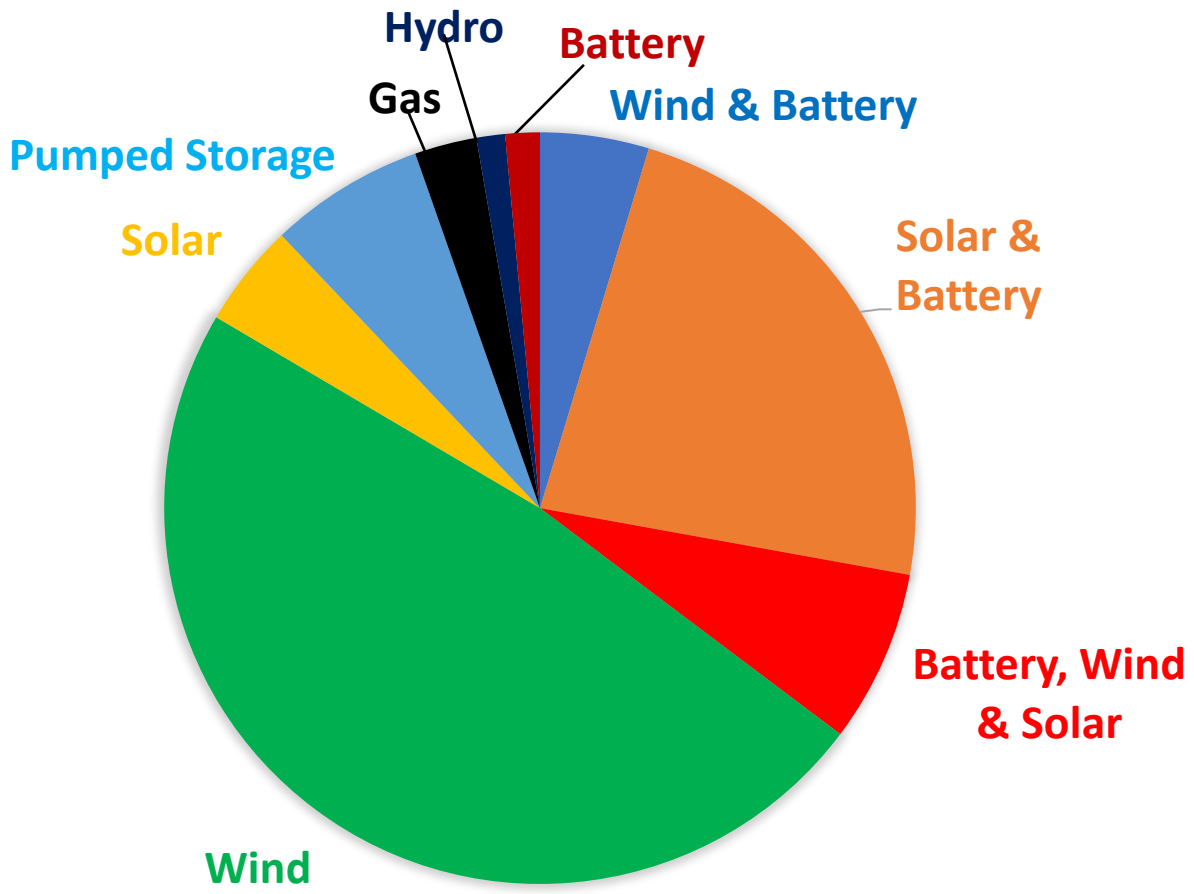




Montana DEQ: Understanding Energy in Montana 2023

Power Producers Plan Wind, Solar, & Battery for Montana

Total 6,734MW in Northwestern Energy Interconnection Queue

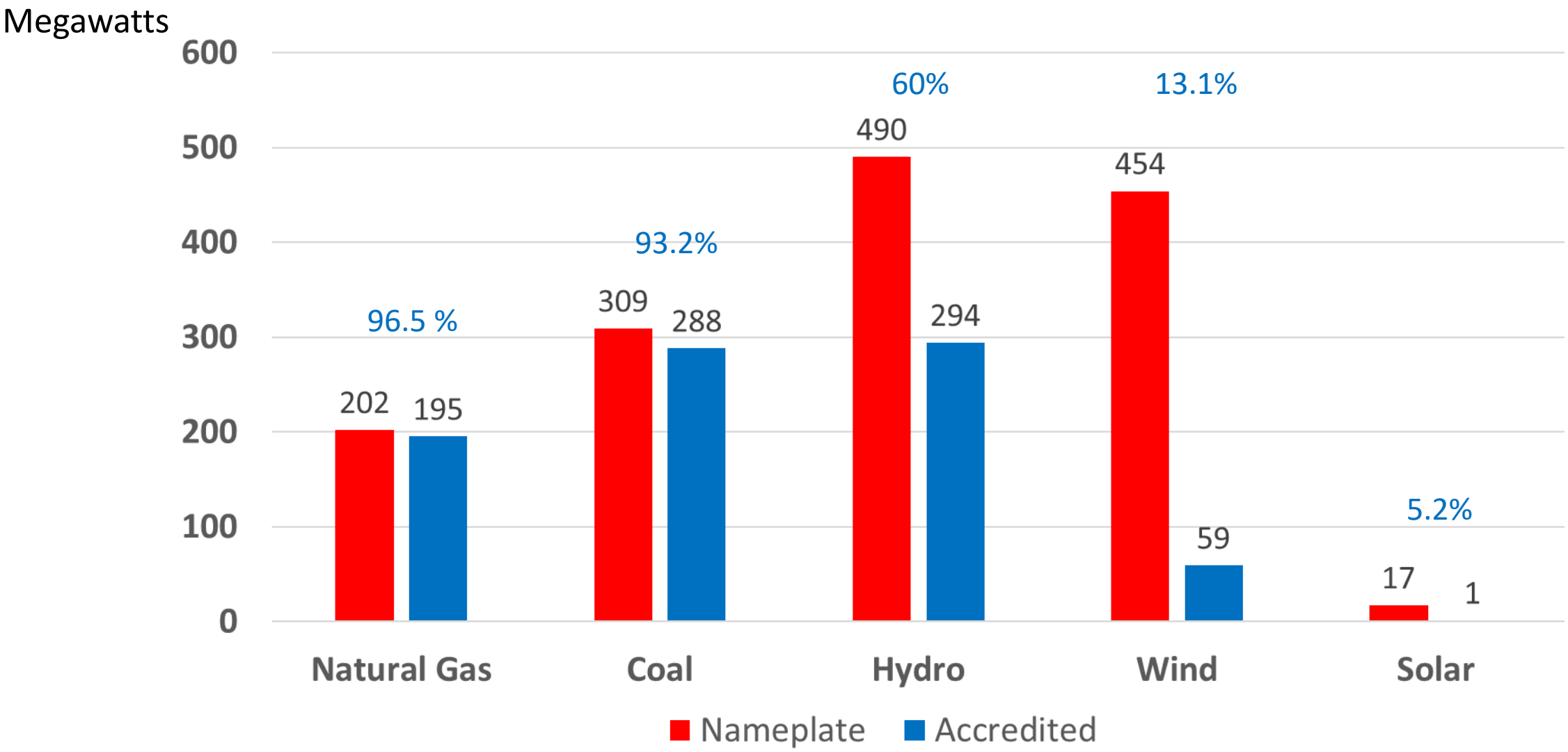


- Huge project backlog
- First come, first served
- 10% project completion

source: https://www.oasis.oati.com/NWMT/index.html

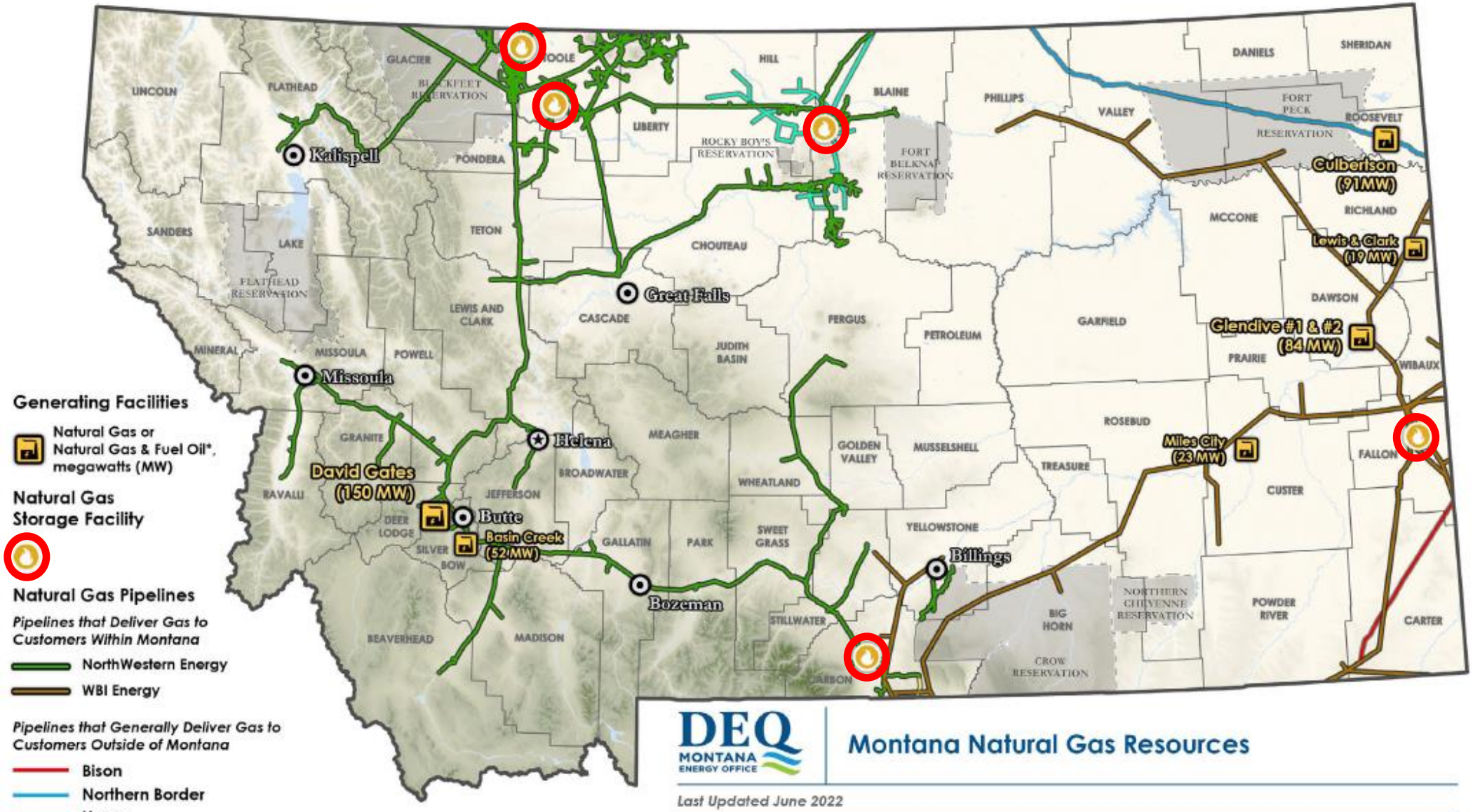
How Do Generation Sources Score on Ability to Serve Peak Demand?

Accreditation Scores Set by Regional Regulators



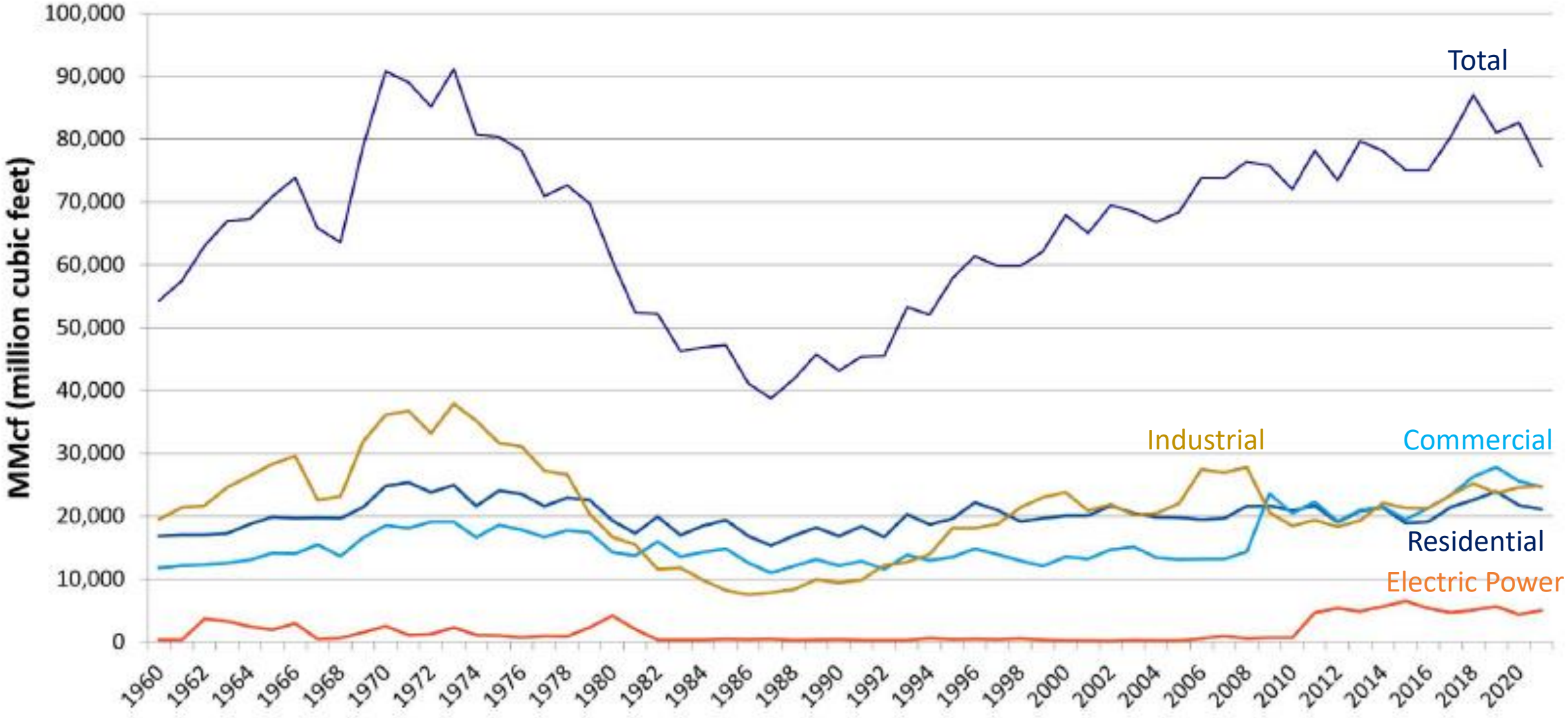
Northwestern Energy : Net Zero by 2050, Montana 2021 Portfolio

Imports Provide Half of Montana's Natural Gas



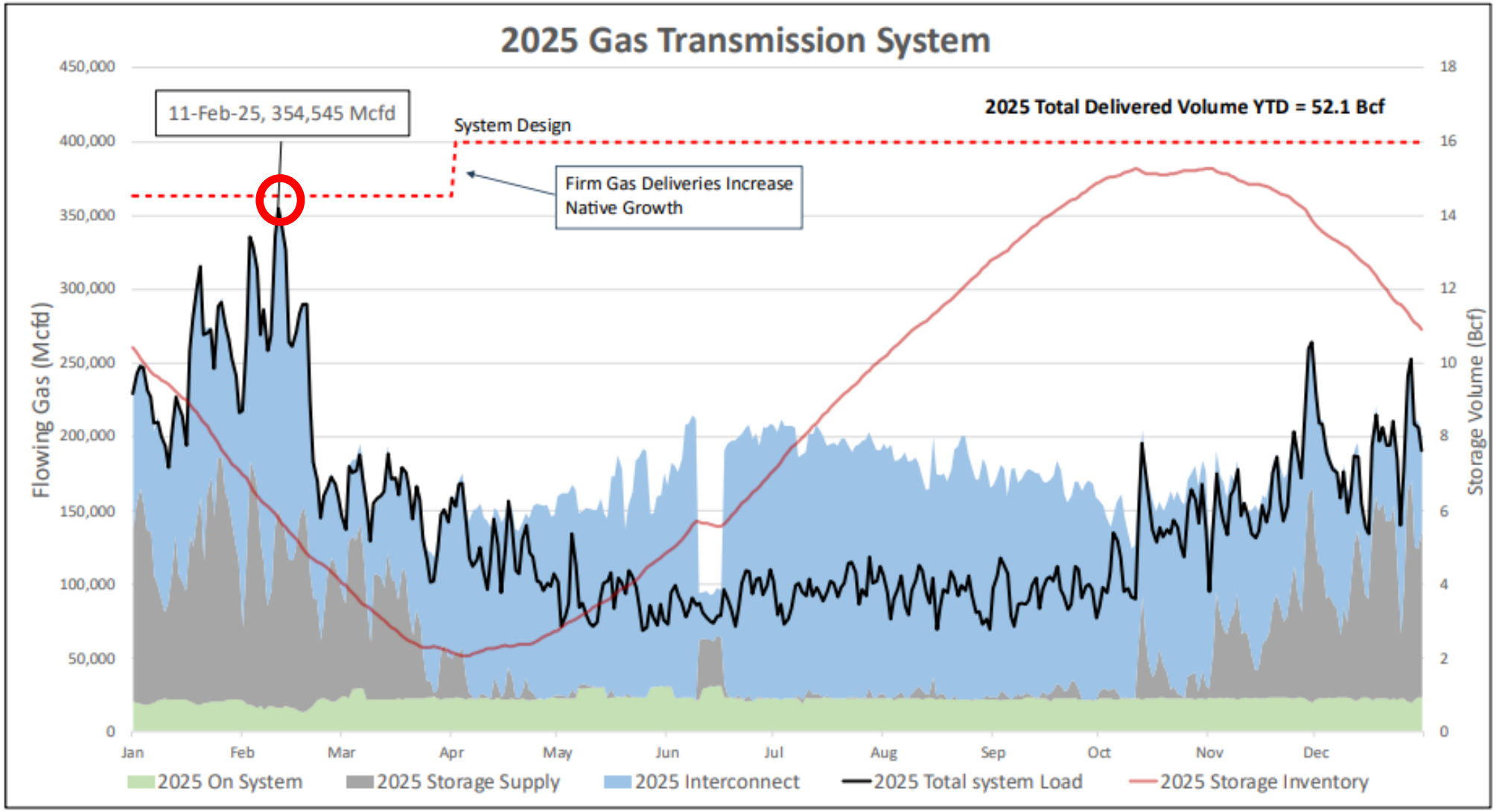
Natural Gas: a Minor Contributor to Montana Electricity

Adding a 500MW Gas Generation Plant Would Increase Load 50%

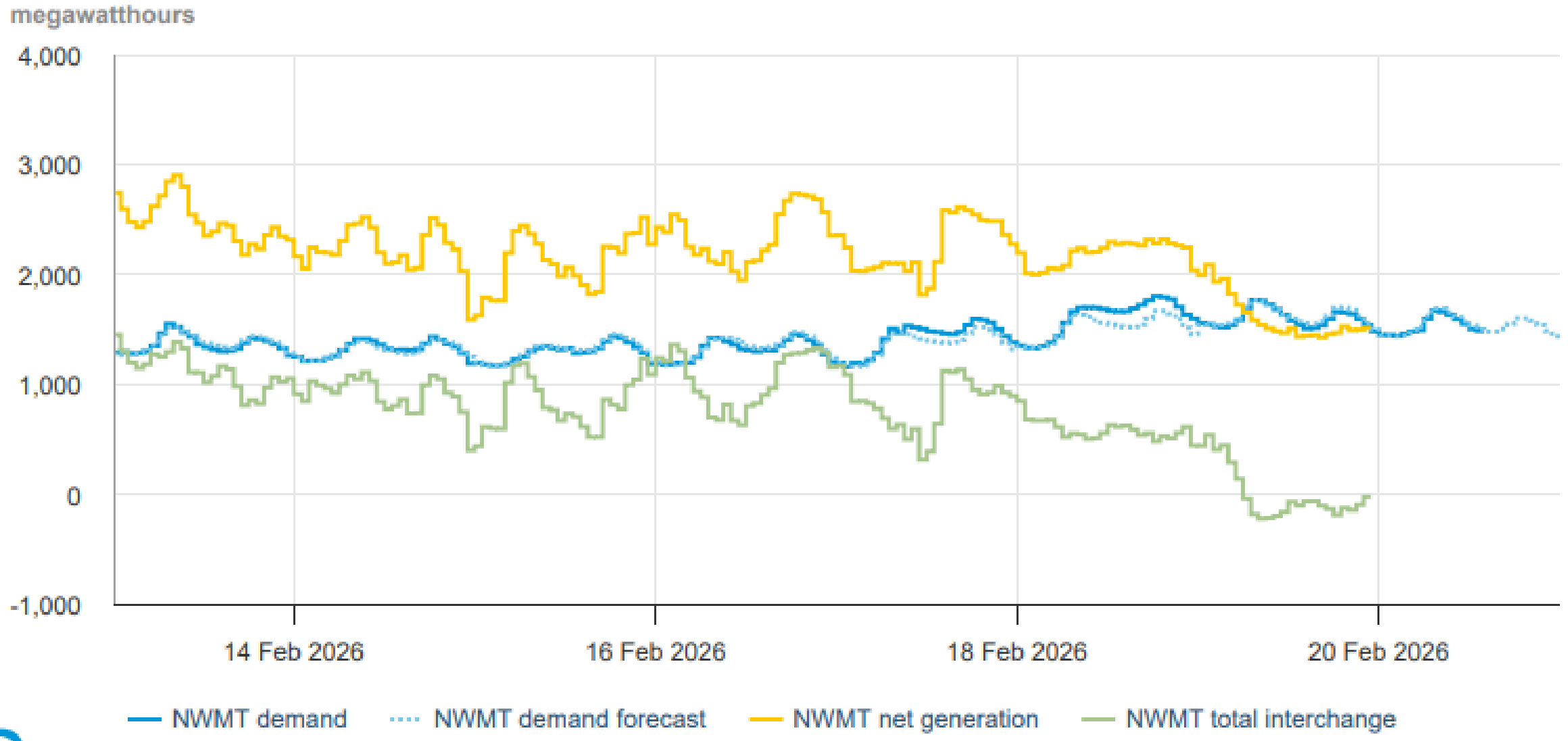


Understanding Energy in Montana 2023, Montana DEQ

Montana's Gas System is at Full Capacity



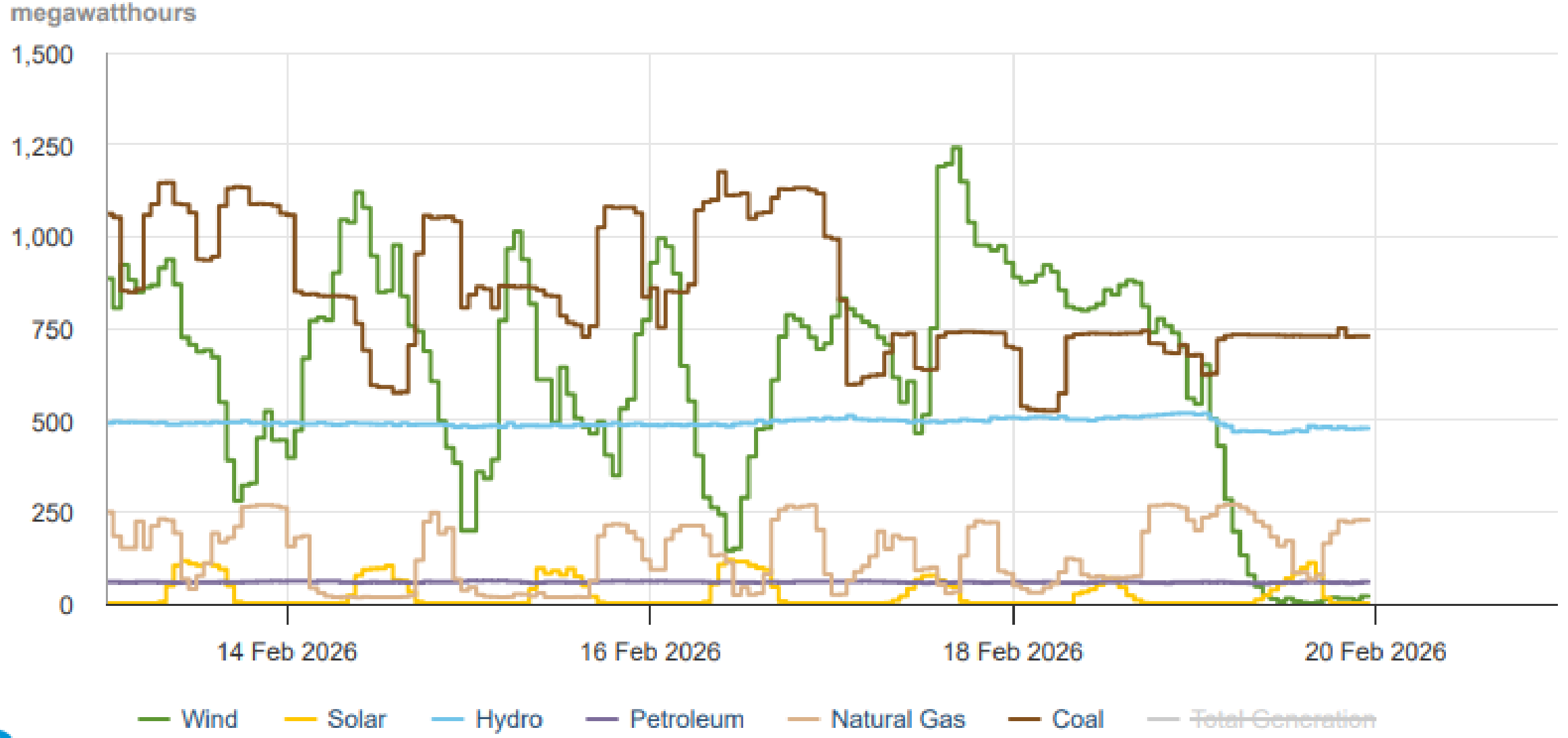
Montana is a Net Energy Exporter



eia Data source: U.S. Energy Information Administration

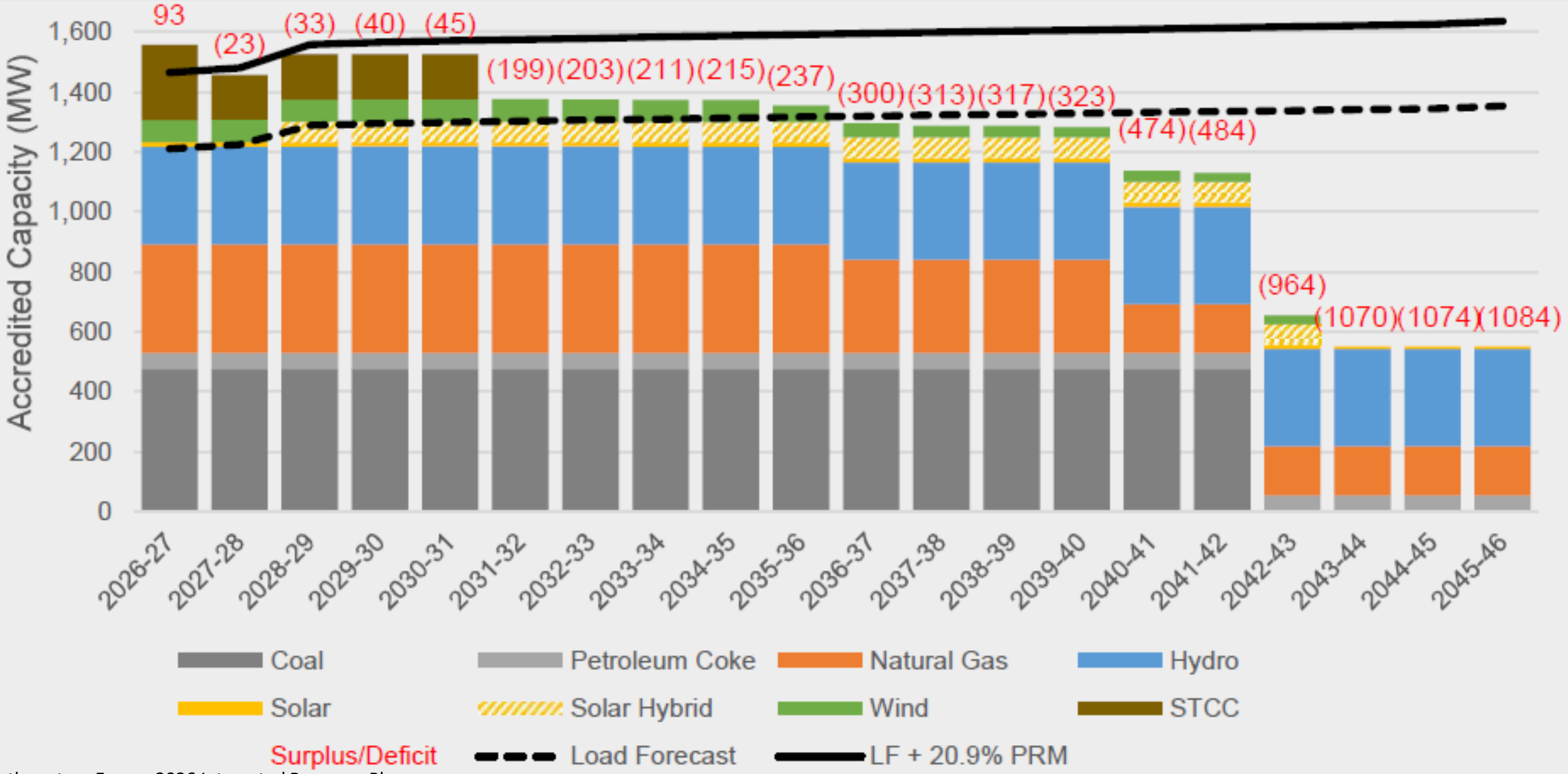
Coal, Wind, and Hydro Dominate Montana Energy

Natural Gas for Peaking/Firming



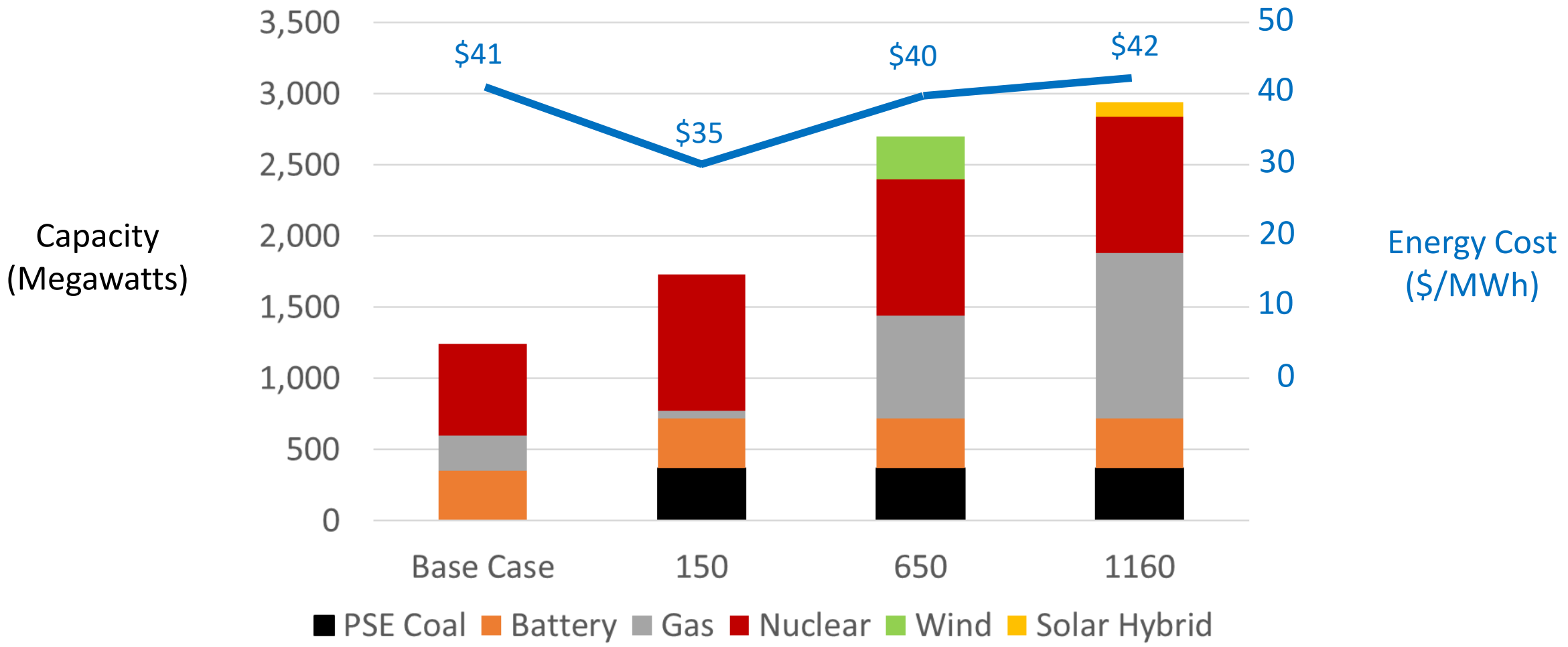
eia Data source: U.S. Energy Information Administration

Northwestern Energy Long Term Energy Forecast



Northwestern Energy Plans for Data Center Growth

Capacity Additions (MW) for Base Case and Data Center Loads of 150, 650, 1160 MW



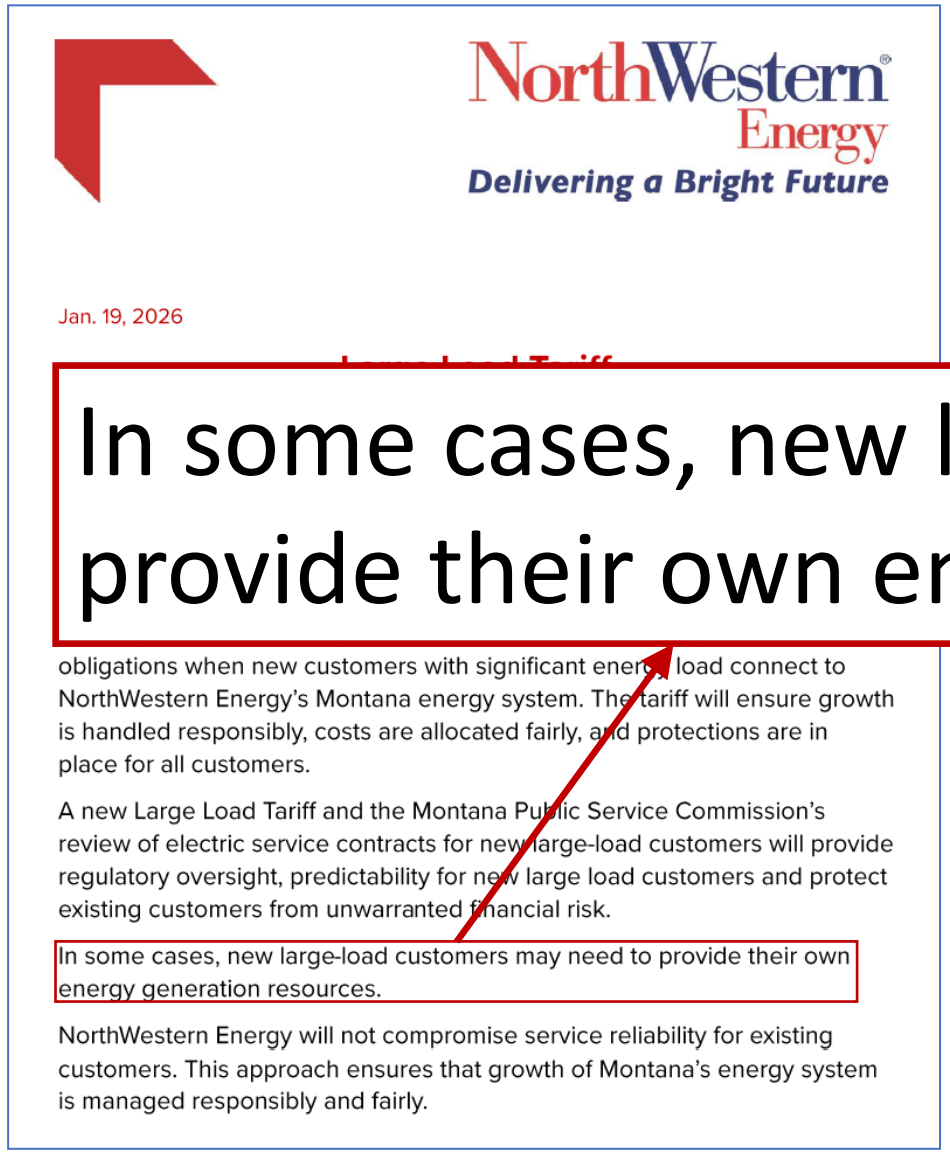
Data Centers Have Electricity Supply Options

- Northwestern Energy
  - Regulated by Montana PSC
  - Comply with statute 69-8-201(1)(b) "…**electricity service shall not adversely impact existing customers..**"
  - Integral to the Northwestern Energy rate base

- Market "Choice"
  - Bilateral agreement with independent power producer (IPP)
  - Regulated by FERC, uses WECC transmission network
  - Independent of Northwestern Energy rate base

- Bring Your Own
  - Behind/In Front of Meter

Structured Safeguards for Data Center Electric Service



NorthWestern Energy
Delivering a Bright Future

Jan. 19, 2026

obligations when new customers with significant energy load connect to NorthWestern Energy's Montana energy system. The tariff will ensure growth is handled responsibly, costs are allocated fairly, and protections are in place for all customers.

A new Large Load Tariff and the Montana Public Service Commission's review of electric service contracts for new large-load customers will provide regulatory oversight, predictability for new large load customers and protect existing customers from unwarranted financial risk.

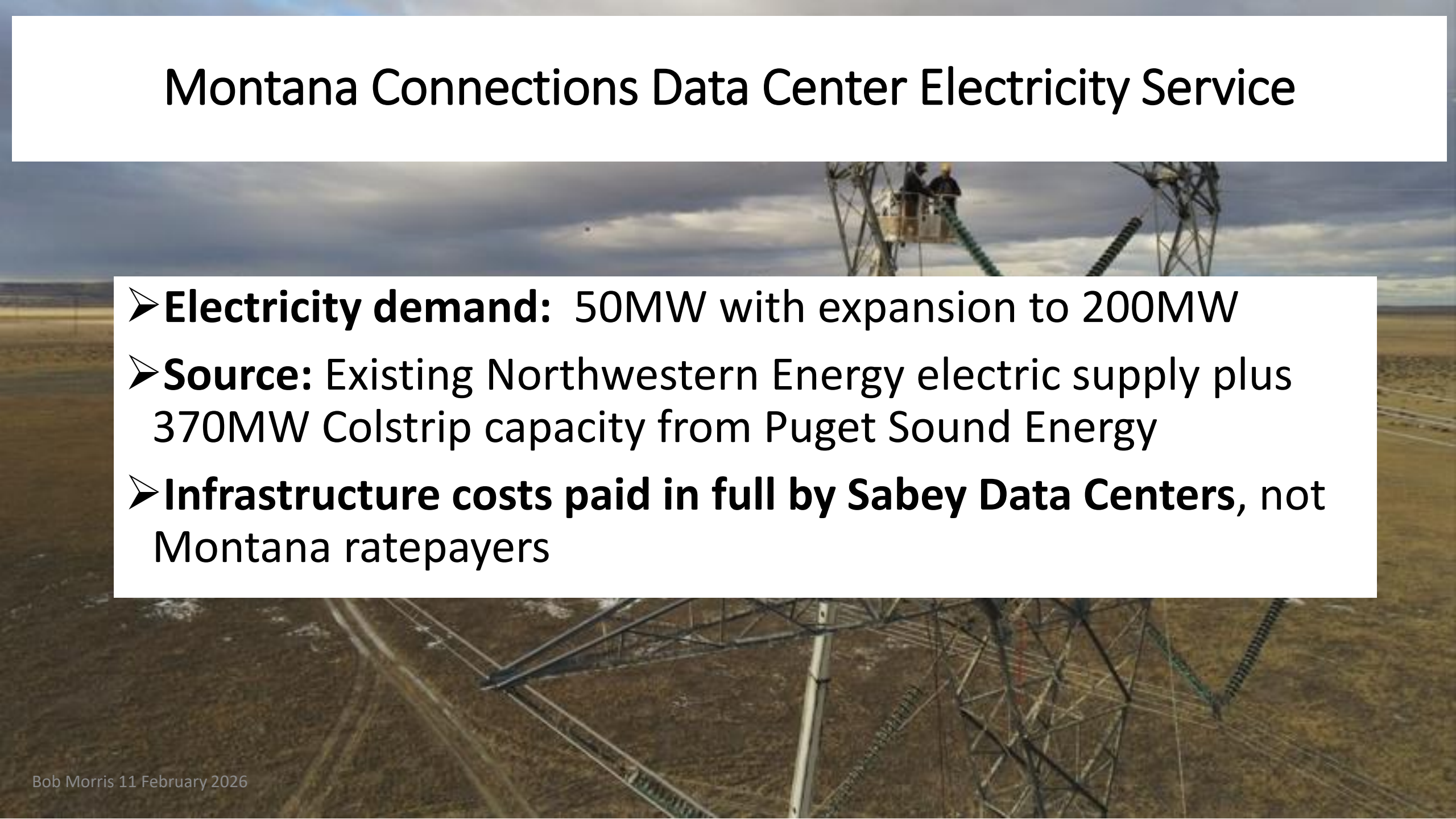
In some cases, new large-load customers may need to provide their own energy generation resources.

NorthWestern Energy will not compromise service reliability for existing customers. This approach ensures that growth of Montana's energy system is managed responsibly and fairly.

- **Rates are protected by law:** State law requires PSC to ensure new large loads to not increase rates for existing customers
- public input through hearings.

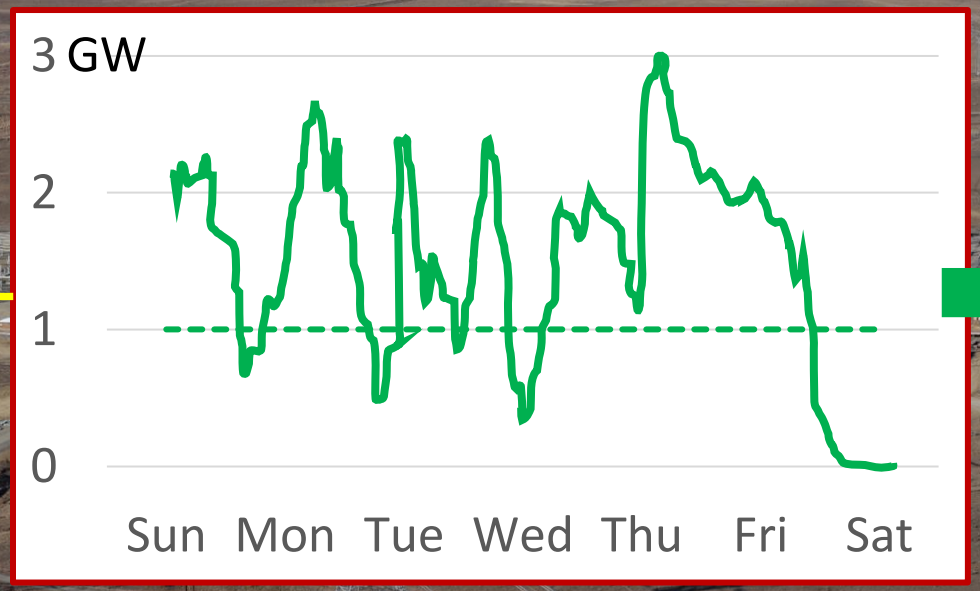
In some cases, new large-load customers may need to provide their own energy energy resources.

Montana Connections Data Center Electricity Service



- **Electricity demand:** 50MW with expansion to 200MW
- **Source:** Existing Northwestern Energy electric supply plus 370MW Colstrip capacity from Puget Sound Energy
- **Infrastructure costs paid in full by Sabey Data Centers**, not Montana ratepayers

Broadview Data Center Energy Strategy



WECC

Montana – Executive & Legislative Energy Initiatives

DEQ MONTANA

Governor's Energy Task Force

Provide recommendations and strategies to increase the supply of affordable and reliable energy options for Montana

MONTANA LEGISLATURE

INTERIM COMMITTEE

ENERGY AND TECHNOLOGY INTERIM COMMITTEE (ETIC)

Electric Transmission

PSC Reform

Revisions to MCA 69-8-201 Large Loads

Executive Energy Authority

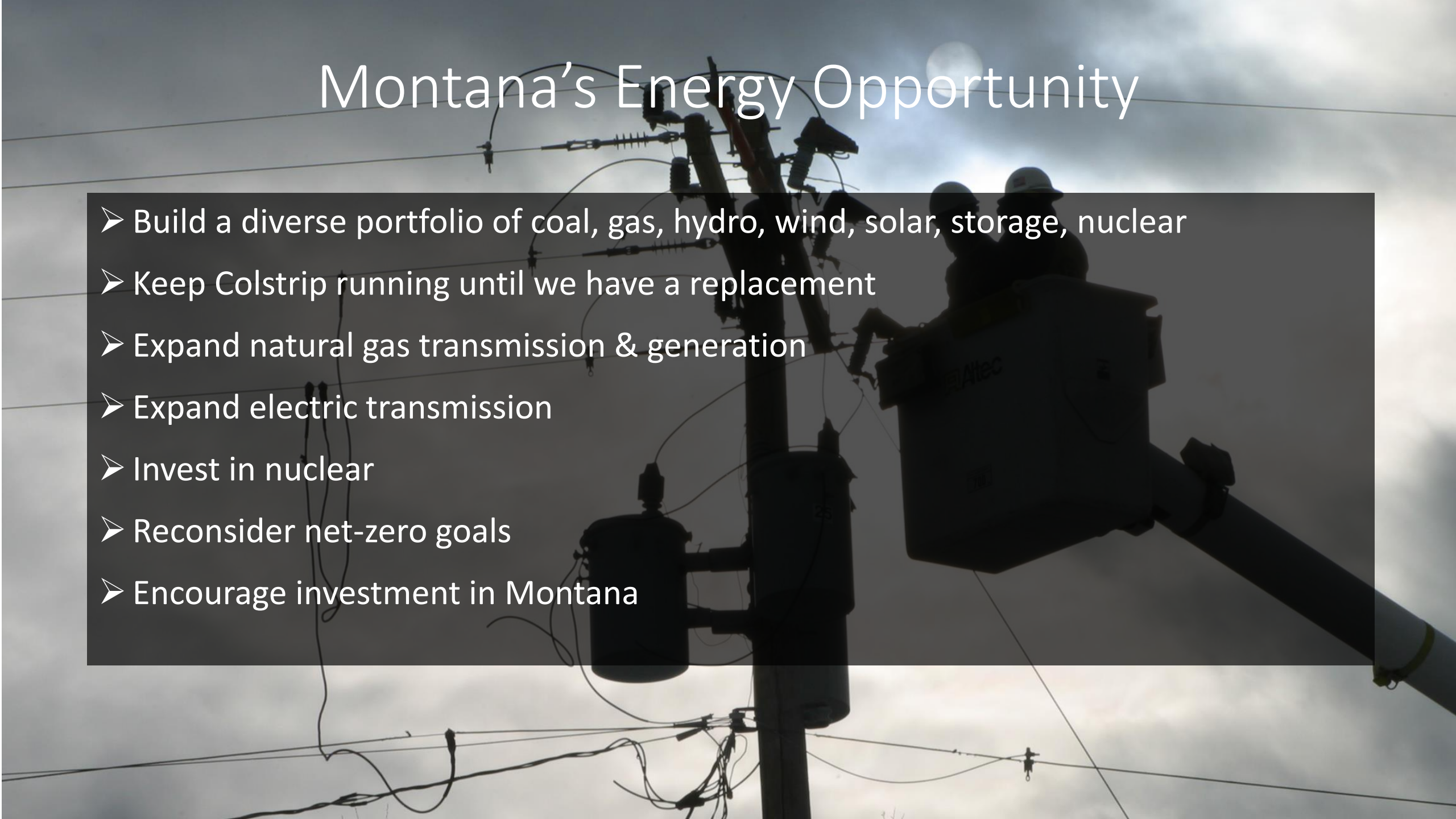
Gas Transmission

Nuclear

Geothermal

Regulatory and market uncertainty is discouraging energy investment in Montana

Montana's Energy Opportunity



- Build a diverse portfolio of coal, gas, hydro, wind, solar, storage, nuclear
- Keep Colstrip running until we have a replacement
- Expand natural gas transmission & generation
- Expand electric transmission
- Invest in nuclear
- Reconsider net-zero goals
- Encourage investment in Montana