MGA MID-GRID 2.0: Setting the stage

April 17 & 18, 2023

Chicago, IL







- 1. Listen to and learn from a diverse set of viewpoints on Midwest grid reliability, affordability, and decarbonization.
- 2. Develop a shared understanding of the physical changes and needs on the grid, now vs 2019 (MID GRID 1.0 launch)
- 3. Identify priority issues and topics for MGA through 2023 and beyond





What's changed since 2019?





MID GRID 1.0 Accomplishments

- MGA Vision Statement
- Regional Letter to MISO CEO John Bear
- An MGA letter sent to the CEOs of PJM, MISO, and SPP
- Transmission Planning and Development Primer for Midwestern Policy Makers

The MGA hosted over a dozen public virtual workshops
MGA
GREAT PLAINS

Large-scale transmission planning has begun





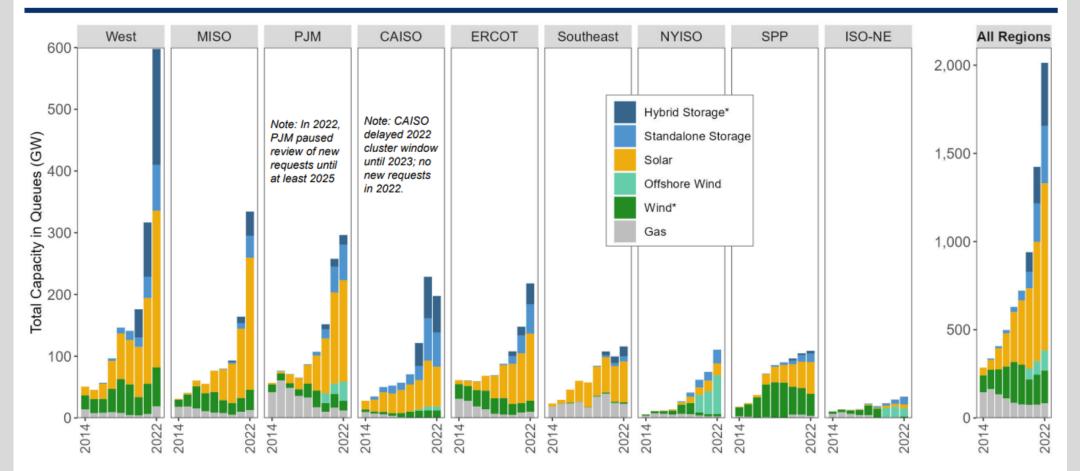


https://cdn.misoenergy.org/20230337%20MISO%20SPP%20JTIQ%20Update628357.pdf https://cdn.misoenergy.org/MTEP21%20Addendum-LRTP%20Tranche%201%20Report%20with%20Executive%20Summary625790.pdf



Acceleration of renewable additions and thermal retirements

Active queue capacity highest in the non-ISO West (598 GW), followed by MISO (339 GW) and PJM (298 GW). Solar and storage requests are booming in most regions.



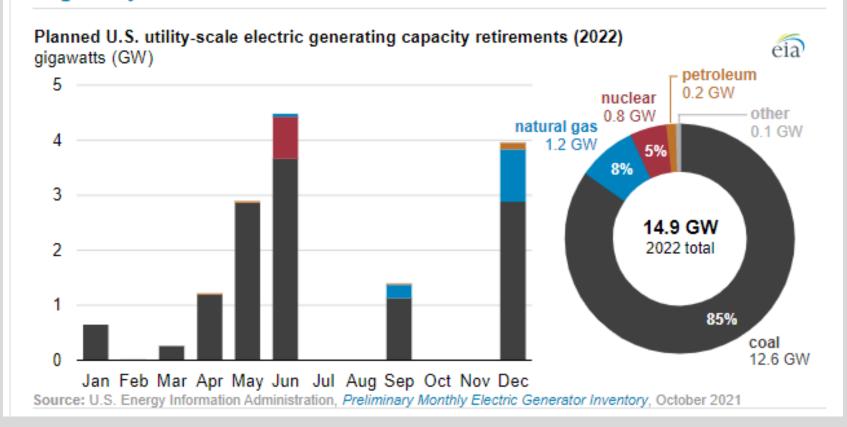


https://emp.lbl.gov/sites/default/files/queued_up_2022_04-06-2023.pdf



JANUARY 11, 2022

Coal will account for 85% of U.S. electric generating capacity retirements in 2022





https://www.eia.gov/todayinenergy/detail.php?id=50838

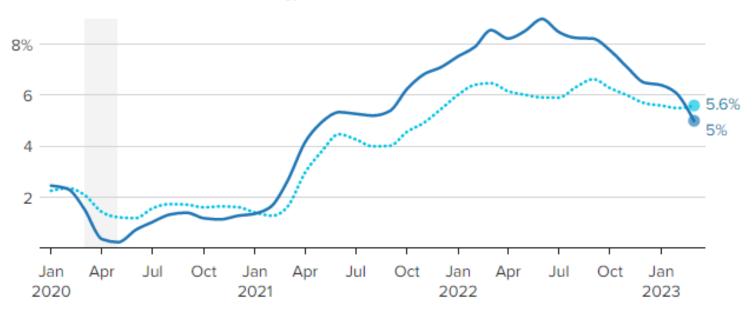


New trends: inflation

U.S. consumer price index

Year-over-year percent change through March 2023

- All items ···· Less food and energy



Note: Shaded area indicates recession.

Chart: Gabriel Cortes / CNBC Source: U.S. Bureau of Labor Statistics Data last updated April 12, 2023





https://www.cnbc.com/2023/04/12/cpi-march-2023-.html



What is needed today?

What is Needed

A broader, comprehensive long-range transmission plan is needed to help define and shape the shared future we want. A long-range plan will be used to evaluate assumptions and identify the most important sensitivities to differentiate plans or solutions that are likely to succeed from those more likely to fail. In this effort, proactive leadership and dynamic, data-driven transmission studies focused on long-term goals are needed to reshape the Midwestern states' energy generation and delivery systems to meet the needs of the future while fostering economic growth, development and prosperity.

Vision Statement

Accordingly, the MGA MID-GRID 2035 process supports the development of a regional, coordinated long-range transmission plan that is consistent with Organization of MISO States' Long-Range Planning Principles.¹ The development of the long-range plan should be conducted by the Regional Transmission Operators serving the participating states with the collaborative input from states and interested stakeholders that meet the following objectives:

- · ensure reliability requirements continue to be met while delivering the lowest-cost electricity;
- identify and enable efficient ways to achieve each state's individual and shared economic development and policy goals;
- utilize, to the maximum extent reasonable, current transmission infrastructure and right-of-way corridors within the context of each state's long-term planning needs to support meaningful public engagement and minimize siting challenges;
- explore a variety of options including transmission expansion and other emerging grid technology solutions to maximize grid flexibility and meet other system needs;
- identify the benefits and costs of the identified needs and opportunities and
- develop recommendations through a transparent stakeholder process.





A broader discussion for MID GRID 2.0

- How do we maintain a reliable and affordable grid amidst so much change?
- Do Midwest states' policies align for efficient, equitable infrastructure deployment?
- State and national security needs and their grid implications
- Defining and attaining grid resilience



Questions & Comments



