NARUC Summer Policy Summit

Subcommittee on Clean Coal and Carbon Management: EPA's Evolving Authority

This session will begin at 11:15 am

EPA's Evolving Authority: Federal Regulation of Carbon Dioxide from Power Generation

NARUC Subcommittee on Clean Coal and Carbon Management
July 18, 2022

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West Virginia v. EPA
Major Questions Doctrine

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Case Summary

- On June 30, 2022, the U.S. Supreme Court issued a 6-3 decision in West Virginia v. EPA, limiting in part how the U.S. Environmental Protection Agency (EPA) may regulate greenhouse gases (GHGs) under Section 111 of the Clean Air Act.
- In an opinion by Chief Justice Roberts, the Court concluded under the major questions doctrine that Congress did not clearly grant EPA in Section 111 the authority to set emission standards based on generation shifting.
- Justice Gorsuch wrote a concurring opinion that provided some additional observations about the major questions doctrine. Justice Kagan wrote the dissent and would have allowed generation shifting under Section 111.
- The decision does not stop EPA from regulating GHGs from power plants, but significantly affects the manner in which it can be done.

Major Question Doctrine

- The Court explained that in "extraordinary cases," "the 'history and the breadth of the authority that [the agency] has asserted,' and the 'economic and political significance' of that assertion, provide a 'reason to hesitate before concluding that Congress' meant to confer such authority." (citing FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 159–60 (2000)).
- Explained that separation of powers principles and the Court's understanding of legislative intent make it "reluctant to read into ambiguous statutory text" sweeping authority. In such cases, an agency must point to "clear congressional authorization."
- The EPA approach of "generation shifting" under the EPA Clean Power Plan triggers the major questions doctrine. The Court explained that EPA purported to have found authority to substantially restructure the American energy grid in an "ancillary provision" of the Clean Air Act, section 111(d).

Key Reasons Why the Clean Power Plan Exceeded EPA Authority under the Major Questions Doctrine

- EPA's generation shifting approach was inconsistent with 40 years of application of Section 111.
- Prior to 2015, EPA had always set emissions limits under Section 111 based on the application of measures that would reduce pollution by causing the regulated source to operate more cleanly. Generation-shifting was a "fundamental revision" of Section 111.
- The term Best *System* of Emissions Reduction (BSER) was not broad enough to mean any "system" the EPA could devise.
- The Court explained that without context almost anything could constitute a "system." The word is an "empty vessel" and precisely the kind of "vague," broadly worded delegation that could not constitute clear congressional authorization of major authority.
- EPA had no particular expertise to set national policy on the appropriate mix of electricity generation sources and fuels. Cited to other recent examples, CDC and OSHA COVID rules.

How Does West Virginia v. EPA Affect EPA Power Plant GHG Regulations Moving Forward?

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What Can EPA do under 111(d)?

- What Approaches Are Prohibited?
  - The decision did not address many specifics on how to craft a future regulation, but it is clear that cap-and-trade and generation shifting are not permissible under 111(d).
  - The decision did not address the Affordable Clean Energy (ACE) Rule approach of limiting GHG controls to "inside the fence."
- What approaches Are Permissible?
  - The opinion recognizes "'efficiency improvements, fuel-switching,' and 'add-on controls' are 'more traditional air pollution control measures'" are historic tools EPA has used.
  - But the opinion rejects the idea that EPA could force a coal plant to become a natural gas plant.

What About Carbon Capture, Utilization, and Sequestration? Not Likely

- The dissent argues that Carbon Capture, Utilization, and Sequestration (CCUS) may be permissible under the majority opinion but not does consider how 111(d) feasibility and cost limits will apply.
- Key Limits Under 111(d)
  - Approaches require cost effectiveness and feasibility, see 111(a)(1), where an approach has been adequately demonstrated.
  - Any approaches should be consistent with prior EPA regulatory approaches under 111.
  - Section 111(d) does not authorize EPA "to direct existing sources to effectively cease to exist."
- States have the first role to issue plans under Section 111(d) for existing sources.

How Will the Case Affect Existing Coal Plants?

- Currently, the U.S. coal fleet totals approximately 200,000 MW.
- Announced coal retirements are 86,000 MW during 2022-2030.
- The PJM coal fleet totaled roughly 49,000 MW last year. Announced PJM retirements are 24,000 MW by 2030.
- The MISO coal fleet totaled roughly 55,000 MW. Announced MISO retirements are 27,000 MW by 2030.
- However, retirements are likely to be greater because of upcoming EPA regulations.

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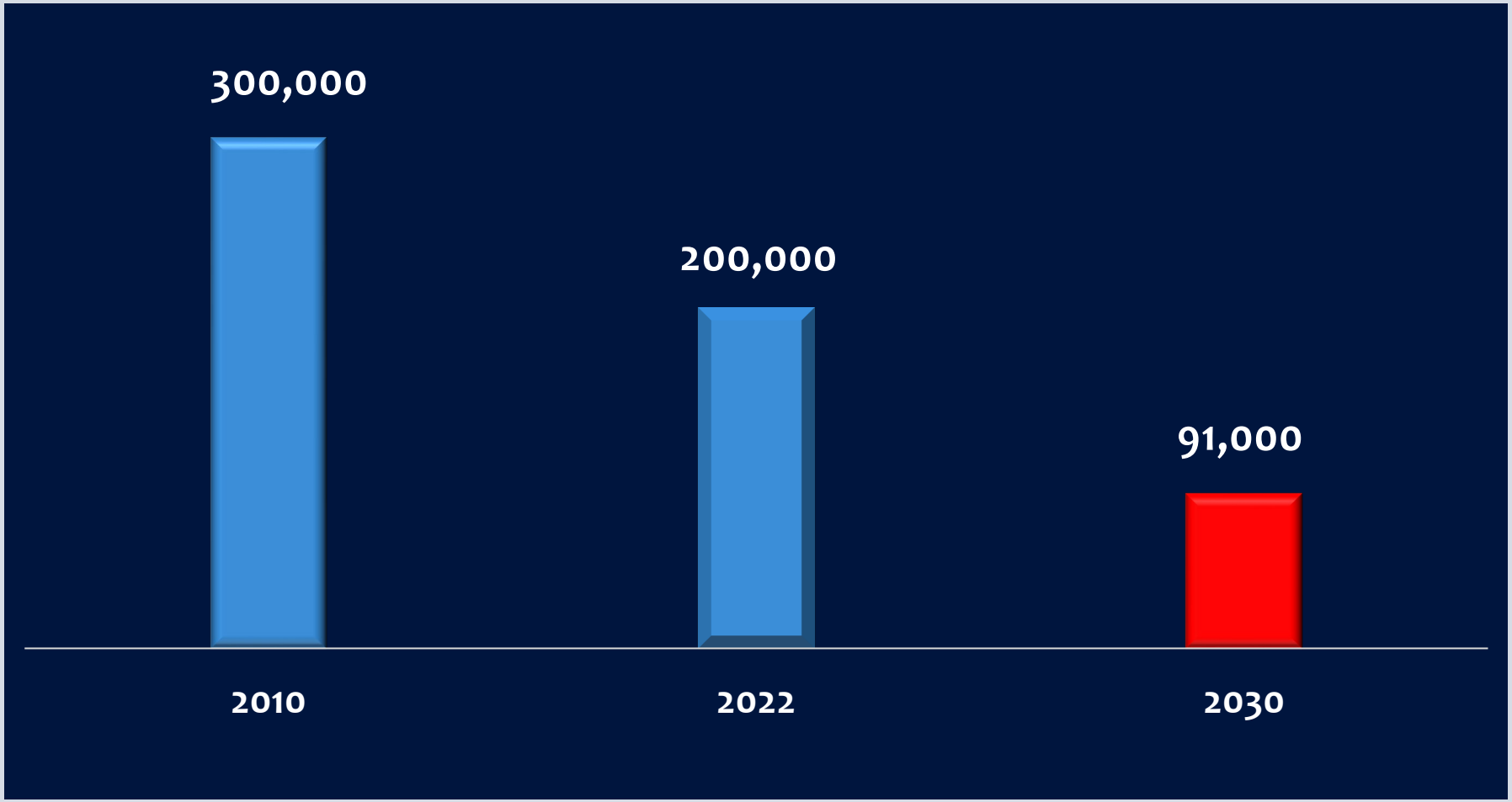
How Will Current EPA Policy Affect Coal Plants?



U.S. coal fleet (MW)

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Does West Virginia v. EPA Affect Other Ongoing Actions or Rulemakings?

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Proposed EPA Rules Likely to Impact Power Plants

EPA is implementing or will finalize the following rules within the next 2-3 years:

- Coal combustion residuals (CCR) rule
- Regional haze rule
- Cross-State Air Pollution Rule (ozone transport rule)
- Effluent limitations guidelines (ELG) rule
- 111(d) replacement rule (based on West Virginia v. EPA)
- Revised MATS (mercury) rule
- Revised ozone standard (possible)
- Revised PM2.5 standard (possible)
- Revised NSPS for new gas-fired generation

Are There Lurking Major Questions in Other EPA Rules?

- As a result of West Virginia, EPA is also ***less likely to pursue more ambitious or novel approaches*** to climate change regulation after this decision, such as setting a GHG NAAQS or international GHG standards under Section 115 of the Clean Air Act.
- In light of these constraints, EPA is likely to continue exploring more stringent regulations under regulatory programs where its authority is more clear, and which have the incidental effect of reducing GHGs by making environmental compliance for power plants more costly.
- However, EPA's use of such existing authorities purely as a pretext for dictating the mix of electricity generation or forcing power plants to shut down could prompt more judicial scrutiny.

Q&A

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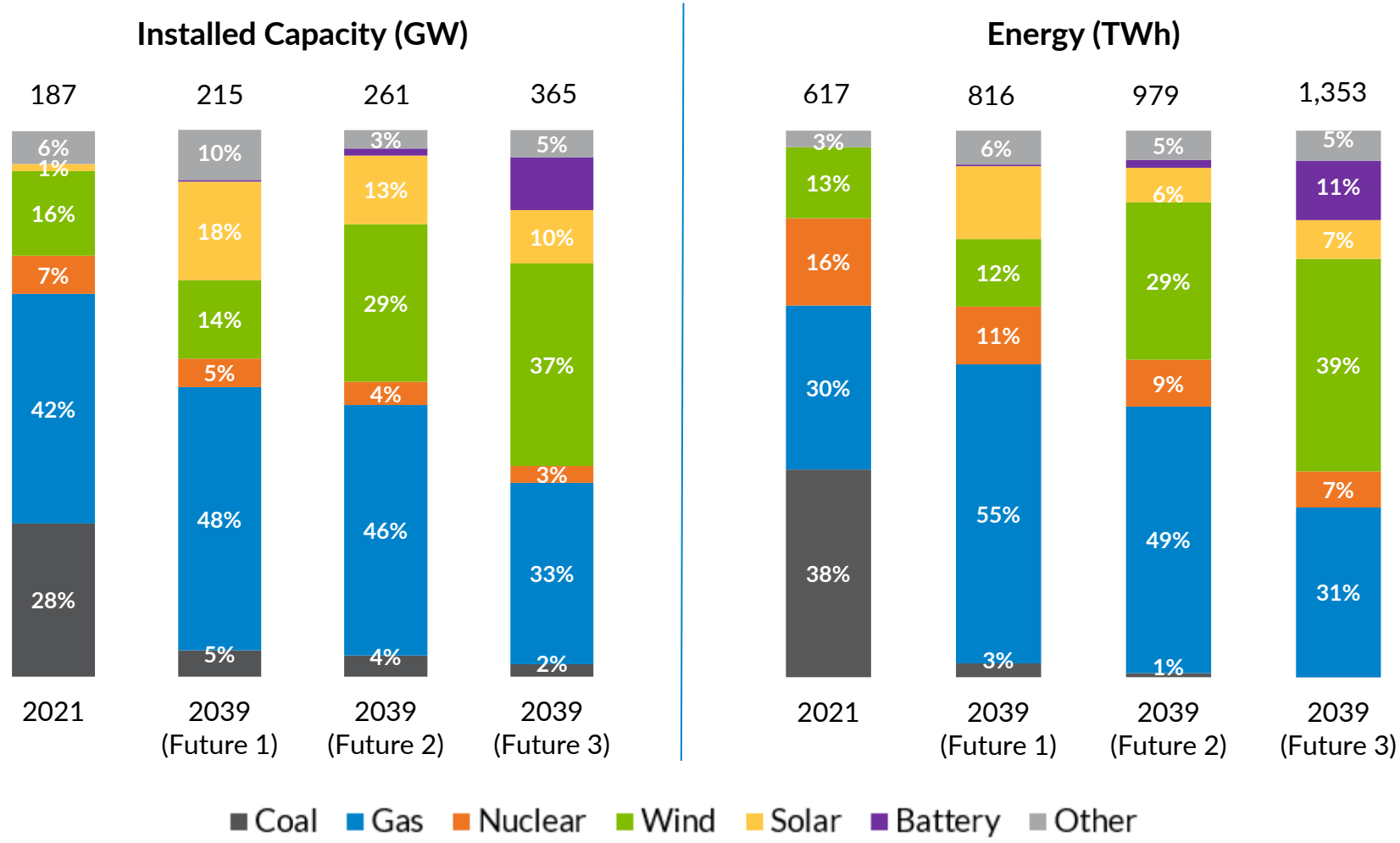
Todd P. Hillman

NARUC – July 18, 2022

As the fleet transition in MISO accelerates to more renewables it is critical that resource requirements are understood and considered



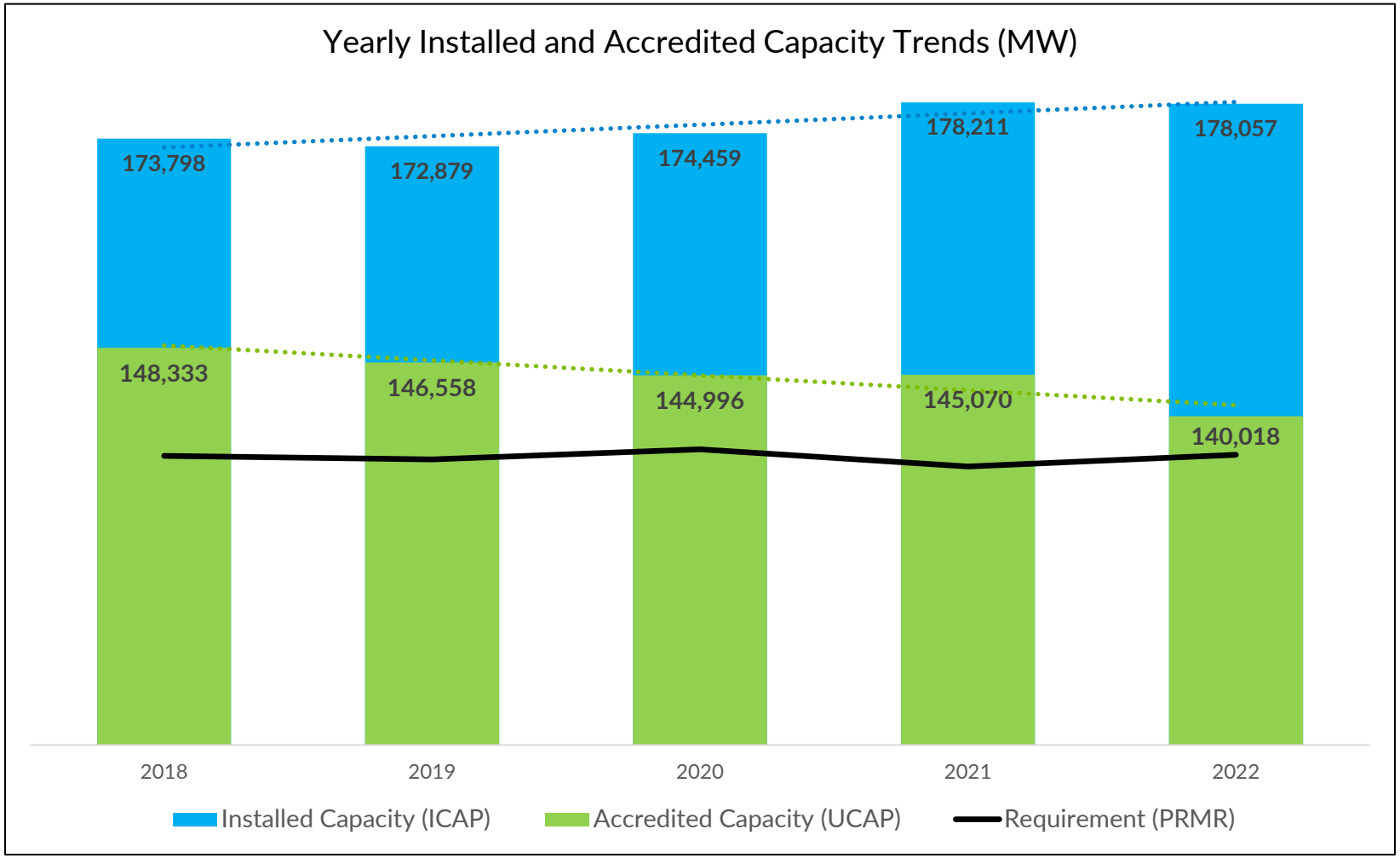
The future fleet mix requires MISO to ensure the system has all attributes to maintain reliability

	Attribute	Battery	Coal	Gas	LMR	Nuclear	Solar	Wind
Controllability	Ramp rate up	●	●	●	◔	◔	◔	◔
	Ramp rate down	●	●	●	◔	◔	◕	◕
	Rapid start up	●	◔	●	◔	◔	●	●
	Minimum downtime	◔	◐	●	◔	◔	●	●
Certainty	Available in all seasons	●	●	●	◔	●	◕	◕
	Fuel availability	◔	◕	◕	◔	●	◐	◔
	Energy adequacy / Output sustainability	◔	●	●	◔	●	◐	◐
	Run time limitations	◔	◔	◕	◔	●	●	●
	Inertia	◔	●	◕	◔	●	◔	◔
	Carbon reducing	?	○	◐	●	●	●	●

Key: Weak Provider of Attribute - ◔
Strong Provider of Attribute - ●

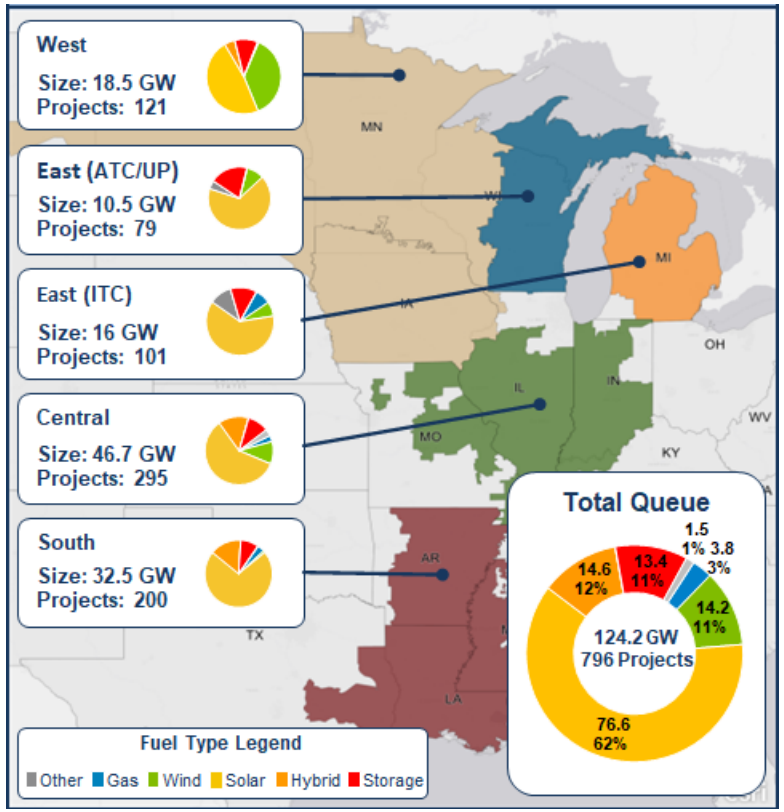
Note: MISO, and the industry as a whole, are still defining Attributes. This list is illustrative and not exhaustive.

While total installed capacity has increased, accredited capacity is declining due to increasing outage rates and lower capacities of weather-dependent resources

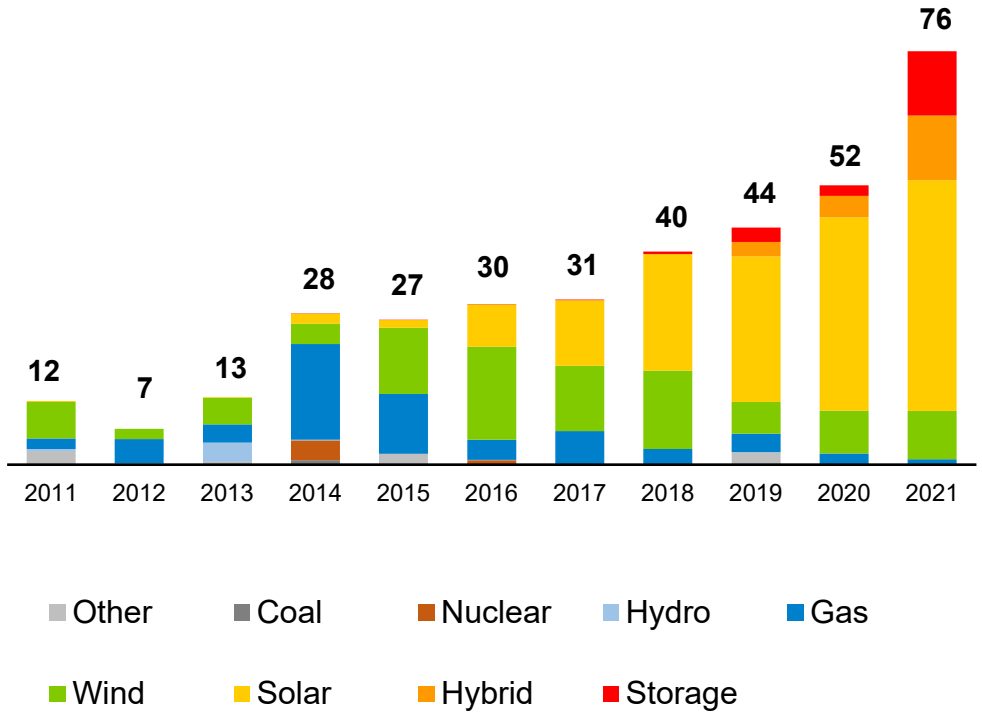


The interconnection queue is dominated by solar and wind, with few controllable resources projected to be added

MISO Active Queue by Study Area

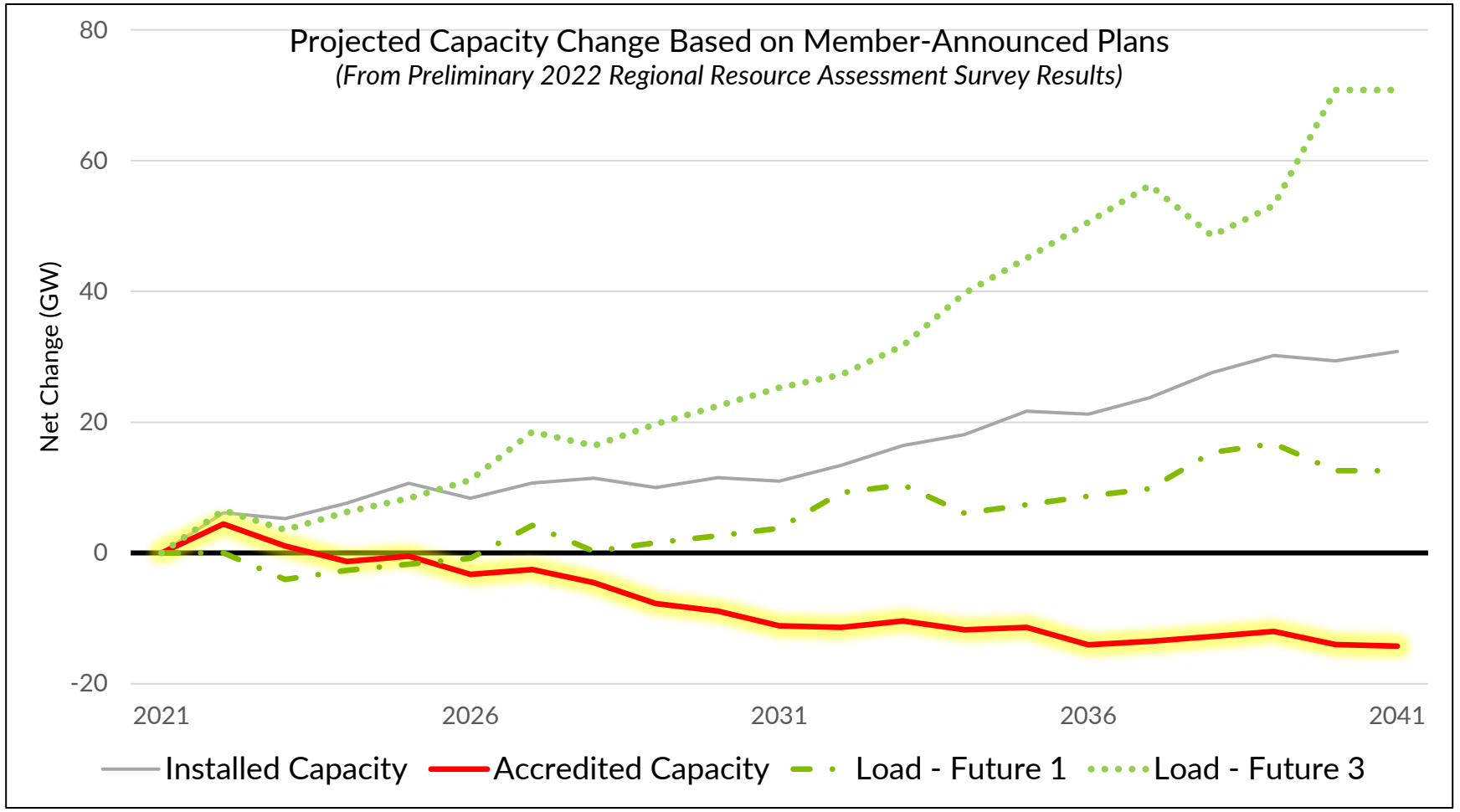


MISO Queue Historical Trend by Requested Generation (GW)



Queue data as of 5/16/2022

A survey of member plans shows a gap in accredited capacity vs. increasing load levels, and hence increased reliability risk



*Future projections calculated as change from Future 1 2022 load assumption

Estimated accredited capacity: 16.6% for wind; 35% for solar, 87.5% for battery, 90% for coal, 90% for gas, and 95% for nuclear

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Thanks for attending.
The next session begins at 2:00 pm.