FACT CHECK: THE COST OF REPLACING PRAIRIE STATE



Independent analysis using trusted, public data finds that in 2030 retiring the Prairie State coal plant and replacing its energy and capacity from other sources will incur little or no additional cost.

Illinois communities have **multiple options to affordably replace Prairie State's energy** and capacity in 2030.





Debt from the Prairie State coal plant is a sunk cost. Allowing the plant, which is Illinois' biggest polluter, extra years to operate **does nothing to help communities with this debt burden.**



IMEA relies on many incorrect assumptions in its argument that replacing the energy and capacity from Prairie State in 2030 will cost \$125 million. These assumptions range from possible-butvery-unlikely to objectively false. They include:

- 1. It assumes an unprecedented amount of "scarcity pricing," which seems to be the main reason given for the high costs IMEA argues will occur. It provides no basis for the assumption that closing Prairie State will cause 85-112 "scarcity hours," which are an extremely expensive energy market event which happen on average *less than once per year*. Never in history have there been the number of scarcity hours that IMEA assumes.
- 2. It ignores that PJM and MISO have capacity markets that would continue to operate as normal, and ignores "safety valves" to protect reliability built into proposed energy legislation. This also contradicts the unfounded scarcity assumptions. The assumptions about the impact of the Clean Energy Jobs Act (CEJA) and Consumers and Climate First Act (CCFA) are not grounded in empirical data, and form the basis for the rest of IMEA's argument.
 - a. Capacity markets, by design, financially incent the deployment of new generation. IMEA's argument appears to assume that no new power generation will come online between now and 2030.
 - b. Both bills have provisions that would not allow power plant closures that threaten reliability.
 - c. The Consumers and Climate First Act would not close gas plants until 2045. Power flow modeling using load projections from PJM and MISO, and renewable energy deployment in proposed legislation, finds that Illinois can close all its coal plants in 2030 and maintain a stable and reliable power grid.
- 3. It does not account for lower prices during most of the year.
- 4. **It includes no energy storage in its portfolio approach**, ignoring a least-cost solution to meet reliability needs. IMEA's assertions about its hypothetical Clean Energy Portfolio are not in line with emerging best practices
- 5. The prices it uses for scarcity pricing are from a completely different region of the country, not Illinois. As the basis of its claim that "scarcity pricing" will cost \$14,000/MWh, IMEA cites a slide from the PJM Independent Market Monitor which refers to prices in "MAD." MAD stands for "Mid-Atlantic and Dominion," a region of PJM which includes Virginia and North Carolina. Scarcity pricing in Illinois is more than 40% lower than this figure.
- 6. The costs it uses for clean energy in 2030 are incorrect, and do not seem to come from any recognized source.
 - a. IMEA uses prices for renewable energy that in some cases exceed the cost of renewable energy today. For example, IMEA used a price of \$35-42 for solar power purchase agreements (PPAs), even though solar PPAs in northern Illinois cost less than this today. Leading analysts including in the U.S. Department of Energy expect both wind and solar prices to fall significantly through 2030.
 - According to the U.S. Department of Energy National Renewable Energy Laboratory (NREL) All Technology Baseline (ATB) the Levelized Cost of Energy (LCOE) from utility-scale solar in Illinois will decline to around \$20/MWh by 2029, and wind will decline to around \$27/MWh. NREL ATB is the mosttrusted source of future generation costs, and is used by utilities and researchers. (<u>https://atb.nrel.gov/electricity/2020/data.php</u>)
 - c. A recent study by Lawrence Berkeley National Lab also projects falling renewable prices and a ~20% decline in wind costs by 2030 (<u>https://emp.lbl.gov/publications/expert-elicitation-survey-predicts-37</u>)
 - d. Solar has already declined in cost by 90% and wind by 71% since 2009, according to the financial advising and asset management firm Lazard. (<u>https://www.lazard.com/perspective/levelized-cost-of-energy-and-levelized-cost-of-storage-2020/</u>)