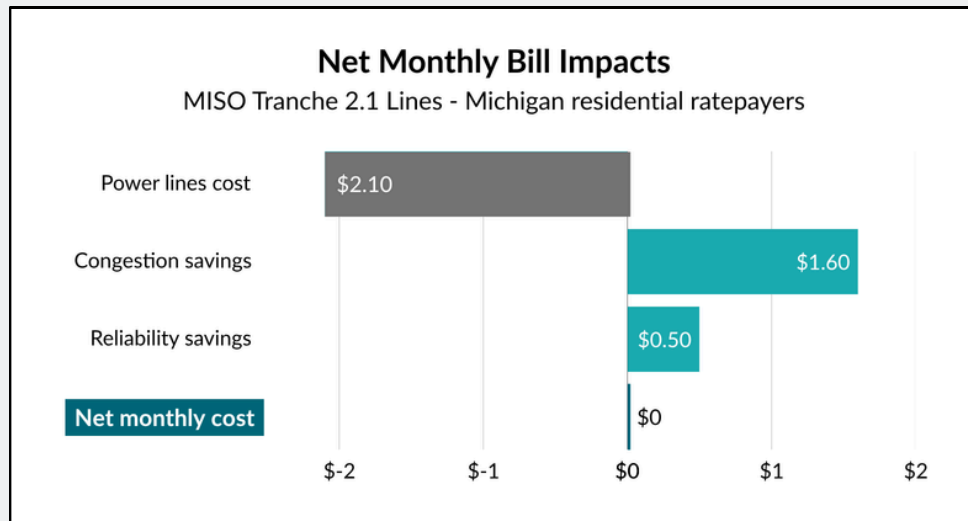


Michigan: No Net Costs for Households from New Power Lines



The Midwest electric grid operator, MISO, approved a set of 24 new power line projects (“Tranche 2.1”) for the Upper Midwest, with several lines to be built in Michigan. The transmission projects are needed to address bottlenecks and other grid deficiencies that are spiking electricity costs and heightening the risk of costly outages in the face of increasing extreme weather and rising demand.

MISO has calculated that these new long-range transmission lines will provide up to \$83 billion in net benefits to consumers over the estimated 40-year lifetime of the lines. 5 Lakes Energy has conducted additional analysis of MISO data to determine future electricity bill impacts at the level of the average Michigan household.

In Michigan, the MISO Tranche 2.1 lines come with zero net costs for residents. The savings that offset 100% of new line costs come via two categories of financial benefits: “congestion savings” as the new transmission creates more room on the grid to alleviate choke points and maximize use of lowest-cost energy, and “reliability savings” as the new transmission lines avert the expenses of future outages.

How will the MISO Tranche 2.1 transmission lines provide enough in financial savings to be built at zero net cost to Michigan residents?

Our analysis of MISO Tranche 2.1 power line benefits finds that future financial savings produced for Michigan residents will fully offset costs for the new power lines. The new transmission will accomplish this by:

- Alleviating grid bottlenecks that restrict supply and spike electricity prices at choke points
- Maximizing the grid operator's ability to use lowest-cost power to serve demand
- Averting the need to build as many new power plants
- Preventing expensive outages caused by overloaded lines or weather events
- Avoiding the extra future expense of replacing aging, smaller transmission lines piecemeal

Michigan residents see some of the highest electricity rates in the Midwest, so it is especially important that these new power lines will pay for themselves by reducing congestion, allowing new energy sources to connect, and making the grid more resilient and reliable.

Methodology

This economic analysis was developed with MISO's detailed business case analyses for the costs and benefits of the MISO tranche 2.1 lines for Future 2A. Electric utilities were mapped to MISO's local resource zones to conduct a state-based analysis. The metrics used in MISO's business case analysis benefits were grouped into two categories: reliability benefits (reduced risks from extreme weather impacts and mitigation of reliability issues); and on-bill benefits (avoided capacity costs, capacity savings from reduced losses, congestion and fuel savings, energy savings from reduced losses, reduced transmission outage costs, and avoided transmission investment). The monetary value of reliability benefits is calculated based on MISO's \$10,000/MWh value of lost load. All costs and benefits have been adjusted for inflation and are represented in real undiscounted 2026 dollars.