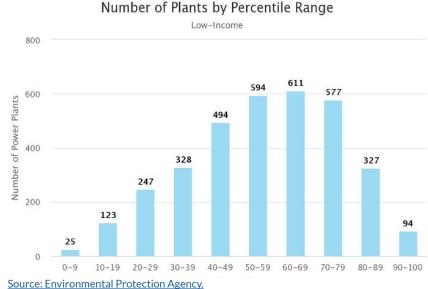
Electricity is an essential service. But most electric transmission lines in the U.S. have reached or surpassed their intended lifespan, and almost no new interregional lines have been planned in the past decade. Failure to expand our grid and connect to diversified generation resources will lead to increased personal energy bills, inhibit progress toward our climate goals, and leave the grid more vulnerable to outages and natural security threats.

But the impacts of grid failure, climate change, and thermal pollution do not fall evenly across communities. Historically, the nation's energy system has operated in a manner that disproportionately harms low-income communities and people of color. In recent comments to FERC, WE ACT for Environmental Justice wrote that "grid unreliability is an urgent environmental injustice issue."²

Responsible, well-planned transmission can help relieve inequities by delivering clean and reliable energy to all communities.³

Many of the most polluting power plants are located near low-income areas and communities of color. Compared to the overall population, communities of color are exposed to nearly 1.3 times more particulate matter pollution, which is linked to numerous health issues.⁴ The racial disparities persist across income levels.

Transmission allows more clean energy to connect to the grid and power homes across the country, reducing our reliance on greenhouse gas-emitting resources.



Transmission keeps the lights on during extreme weather events.

During Winter Storm Uri in 2021, low-income Texans bore of the brunt of prolonged power outages.⁵ More than 200 people died, the majority due to outage-related causes, including hypothermia and carbon monoxide poisoning.⁶ The Federal Reserve Bank of Dallas also estimated the outages caused up to \$130 million in economic losses.⁷

Meanwhile, the Midwest states suffered only a handful of short-term outages during Uri. The difference is that MISO, grid operator for the Midwest, is well-connected to its neighbors by transmission. On just one day of the storm, MISO imported 13,000 MW power and exported 7,000 MW to keep the lights on. By contrast, Texas was able to import just 800 MW over the course of the entire week.⁸

Transmission can reduce power costs.

Low-income communities face disproportionate energy affordability burdens. Increased transmission can reduce line congestion and enable access to more geographically diverse resources, helping to lower system-wide costs to provide electricity.

One study found transmission expansion, and the resulting increase in wind and solar generation, could reduce the average consumer electric bill by more than one-third, from more than 9 cents/kWh to 6 cents/kWh by 2050. This would save a typical household more than \$300 a year based on current electricity consumption levels.⁹

"When energy system failures occur, already vulnerable communities suffer unequal harms ... [T]he transmission planning process can help resolve these inequities." – NAACP of Greater Grand Rapids

Case Studies

South Bronx, New York

In New York City, neighborhoods with poor air quality will see relief in coming decade with the commissioning of two new HVDC transmission lines, which will deliver clean, renewable solar, wind, and hydroelectric power from upstate New York and Canada through lines undergrounded in the South Bronx – a predominantly low-income, non-white neighborhood already experiencing cumulative impacts of multiple sources of pollution, such as gas plants and highways. ¹⁰ Areas of South Bronx as well as Northern Manhattan experience one of the highest rates of death and disease from asthma in the country. ¹¹

Hunters Point, San Fransisco

Due to the construction of the Trans Bay Cable, residents of the Hunters Point community in San Francisco can breathe cleaner air. The new, high voltage direct current (HVDC) transmission line delivers reliable power to San Francisco and led to the 2010 closure of the Hunters Point Power Plant, a generator that has long contributed to a disproportionate number of asthma and cancer cases in the city.¹²

SOURCES

1 American Society of Civil Engineers, "Policy Statement 484 - Electricity Generation and Transmission Infrastructure," 2022; Caspary, Goggin, Gramlich, and Schneider, "Disconnected: The Need for a New Generator Interconnection Policy," at 21, 2021.

2 WE ACT for Environmental Justice comments to FERC Docket No. RM21-17, E-library #20220818-5001, 2022.

 $3\,ACEG's\,primary\,objective\,is\,to\,advocate\,for\,well-planned\,transmission.\,This\,is\,one\,of\,many\,steps\,needed\,to\,address\,historic\,inequities.$

4 Clack et. al., "Consumer, Employment and Environmental Benefits of Electricity Transmission Expansion in the Eastern U.S.," at 17, 2020; Ihab Mikati, et al., "Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status," 2018.

5 The Texas Tribune, "Already hit hard by pandemic, Black and Hispanic communities suffer the blows of an unforgiving winter storm," 2021.

6 FERC - NERC - Regional Entity Staff Report, "The February 2021 Cold Weather Outages in Texas and the South Central United States," at 13, 2021.

7 Federal Reserve of Dallas, "Cost of Texas' 2021 Deep Freeze Justifies Weatherization," 2021.

8 Goggin, Gramlich, Caspary, and Schneider, "Fleetwide Failures: How Interregional Transmission Tends to Keep the Lights on When There Is a Loss of Generation" at 4, 2021.

9 Clack et. al. Report at 9.

10 Clean Path NY.

11 Columbia Center for Children's Health. "Asthma."

12 Shao, Elena, "In San Francisco's Bayview-Hunters Point Neighborhood, Advocates Have Taken Air Monitoring Into Their Own Hands," 2021.