



# COVID-19: Potential Impacts on the Electric Power Sector

Updated June 12, 2020

The Coronavirus Disease 2019 (COVID-19) pandemic is impacting the electric power sector directly (e.g., illness and fatalities among workers) and indirectly (e.g., reduced electricity sales). Most indirect impacts to date have been caused by the economic effects of the pandemic. Long-term impacts are highly uncertain and likely depend on the pandemic's ultimate toll on U.S. public health and the economy.

Potential impacts over the coming months include continued reduced electricity sales, increased electric reliability risks, [reduced utility bill payments](#), and delayed or reduced industry investment activity.

## Reduced Electricity Demand

Electricity demand is determined mainly by weather patterns and economic activity. Economic activity in recent months declined across the country, as governments took actions to slow the spread of COVID-19. These actions forced many businesses to close or curtail operations. [Many U.S. states saw electricity demand drop between 9% and 13% in March and April 2020 relative to previous years](#), although some (e.g., Florida) have not seen significant changes. With some states easing restrictions on businesses in May 2020, electricity demand [rebounded somewhat, but it remains lower than May 2019 in many areas](#).

Reduced electricity demand tends to lower wholesale electricity prices in the near term, as is also the case for other energy commodities like gasoline. Prices in most wholesale electricity markets, which operate in some parts of the country, [declined between 22% and 37% between mid-February and mid-April](#). Consumers may not see lower retail electricity prices, though, because of the timeline of electricity rate regulation by states.

Reduced electricity demand could persist for months or longer. As of June 2020, the U.S. Energy Information Administration (EIA) projects a [5.7% drop in annual electricity demand in 2020](#) compared to 2019. If demand and prices remain low for an extended period, some power plants may become unprofitable. This could accelerate recent trends of [changing conditions in the sector that affect profitability](#). Additionally, utilities may delay or cancel construction of new power plants.

**Congressional Research Service**

<https://crsreports.congress.gov>

IN11300

## Electric Reliability

Electric grid operators were [preparing for the pandemic as the novel coronavirus began spreading in the United States](#), according to the North American Electric Reliability Corporation (NERC). NERC oversees electric reliability in the contiguous United States and adjacent regions of Canada and Mexico. NERC [noted increased reliability risks in Spring 2020](#): potential workforce disruptions due to illness and quarantine, potential supply chain disruptions, and increased cybersecurity risks due to more teleworking employees. According to NERC, these elevated risks are likely to continue throughout the summer, and new risks may emerge. Potential [new Summer 2020 risks](#) include electricity [supply disruptions caused by deferred maintenance](#) and [operational challenges](#) as the share of generation from solar energy increases. Additionally, pandemic protections might cause [utilities to take longer to restore power](#) following emergencies such as hurricanes (the Atlantic hurricane season began on June 1) or wildfires.

## Reduced Bill Payments

Electricity customers may be unable to pay their monthly electricity bills if they have lost income because of the pandemic. Under normal conditions, utilities and their state or local regulators put in place procedures to stop electric service to non-paying customers (these procedures are commonly known as shutoffs). [Many utilities have voluntarily suspended shutoffs](#) and many states and cities have banned shutoffs as part of their COVID-19 response. Many of these shutoff moratoria are temporary, raising some concerns that shutoffs may resume just as the summer season increases the need for air conditioning.

Many utilities anticipate losing revenue in the near term, from a combination of reduced sales and shutoff moratoria. It is unclear how any resulting lost utility revenue may be addressed when normal conditions return. Revenue shortfalls are often recovered by higher electricity rates in future years, though regulators could be reluctant to increase rates if economic activity remains low. It is also unclear what actions utilities and state or local regulators may take if customers accrue large unpaid bills during a shutoff moratorium. Most shutoff moratoria do not include bill forgiveness—customers must ultimately pay for the electricity they use.

Congress has not directly addressed shutoffs or utility revenues in enacted pandemic relief legislation. Implementation of provisions of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act; P.L. 116-136) may have the effect of reducing cases of utility bill nonpayments (as summarized in CRS Report R46401, *COVID-19 Electric Utility Disconnections*).

## Industry Investment Activity

The electric power sector has been undergoing a transition over the last decade or so, characterized by changing energy sources and increasing use of distributed generation. Congress has taken some action to encourage this transition, for example by establishing tax credits to encourage the use of wind and solar. The desired direction and pace of the transition remain a topic of debate.

COVID-19 may affect industry investment, potentially raising issues for Congress. In the near term, companies may not be able to complete planned construction activities in time to meet deadlines for expiring tax credits for [wind, solar, and carbon capture projects](#). On May 27, 2020, the U.S. Treasury Department addressed this issue by [extending some tax credit eligibility deadlines](#). Some Members of Congress have [called for additional modifications](#). In the long term, less favorable economic conditions could slow investment activities in the electric power sector.

Following the U.S. recession in 2008-2009, Congress took a number of actions that drove investment in the electric power sector such as tax incentives and grants provided in

[the American Recovery and Reinvestment Act of 2009](#) (P.L. 111-5). Similar stimulus in response to the current recession may be weighed in the context of deliberations on support for other industries.

## Author Information

Ashley J. Lawson  
Analyst in Energy Policy

---

## Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.