

The Nation's Coal Fleet Is Critically Important

As the nation responds to the COVID-19 pandemic, questions have been raised about which industries are so essential that they should continue to operate. To help answer these questions, the U.S. Department of Homeland Security (DHS) has developed a list of “[essential critical infrastructure](#)” that identifies the industries necessary to support public health and safety, as well as economic and national security. DHS identified the energy sector as “uniquely critical” and listed the nation’s coal fleet and its supply chain—coal production, rail and barge transportation, and equipment suppliers—as critical infrastructure because they are an essential part of the energy sector which supports all other critical sectors.ⁱ

Even before the COVID-19 crisis, the nation’s fleet of coal-fired power plants and its supply chain were essential because they—

- Help to assure the electricity grid is both reliable and resilient,
- Provide fuel security,
- Serve as an insurance policy against electricity shortages and price spikes,
- Produce affordable electricity,
- Contribute to fuel diversity, and
- Support national security.

The following are examples that highlight the importance of the coal fleet during a time of crisis, as well as during the recovery afterward:

- By maintaining a 75-day average stockpile of coal at each power plant, the coal fleet is one of the nation’s most fuel-secure sources of electricity. Fuel security is necessary to ensure a reliable and resilient electricity grid.ⁱⁱ
- A National Security Council memo stated, “... resources that have a secure on-site fuel supply, including nuclear and coal-fired power plants ... are essential to support the Nation’s defense facilities, critical energy infrastructure, and other critical infrastructure.”ⁱⁱⁱ
- The Department of Energy’s National Energy Technology Laboratory (NETL) described coal as being the “most resilient form of [electricity] generation.”^{iv}
- During winter storms, coal-fired power plants have been disproportionately important to keeping the lights on while other electricity sources were curtailed. For example, coal-fired power plants met more than 60 percent of incremental

electricity demand during the Bomb Cyclone of 2018, while natural gas, wind, and solar power were faced with outages.^v

During this or any other crisis, it is critical to ensure that reliable and resilient supplies of electricity are available. The coal fleet is one of the nation's most reliable, resilient, and fuel-secure sources of electricity. Coal is used to generate electricity in 47 states and, last year, coal provided at least one quarter of the electricity in 19 states.^{vi}

Many other electricity sources are intermittent in nature (cannot always produce electricity when needed) or have fuel supply chains that can be disrupted.^{vii} Therefore, it is more important than ever that the nation preserve the coal fleet.

Despite its importance to the nation's energy sector, more than 40 percent of the coal fleet has retired or announced plans to retire in the near future. Losing even more fuel-secure coal-fueled generating units would further jeopardize the ability of grid operators to supply electricity on a 24/7 basis, especially during less-than-ideal circumstances.

Just as DHS did, decisionmakers should continue to recognize the coal fleet's value in these challenging times.

State specific materials explaining the importance of the coal fleet in a time of crisis can be found on our website. So far, we have developed papers for:

- [Alabama](#)
- [Colorado](#)
- [Illinois](#)
- [Indiana](#)
- [Kentucky](#)
- [Missouri](#)
- [New Mexico](#)
- [Pennsylvania](#)
- [Wyoming](#)

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ⁱ Cybersecurity & Infrastructure Security Agency, "Advisory Memorandum on Identification of Essential Critical Infrastructure Workers During the COVID-19 Response," Version 2.0, March 28, 2020. See sections on "electricity industry," "transportation and logistics," and "critical manufacturing."

ⁱⁱ EIA, Electricity Monthly Update, "Electric Power Sector Coal Stocks: March 2018," release date May 28, 2018.

ⁱⁱⁱ This is a document dated 5/29/2018 that was not released officially by the Administration but was leaked to trade press.

^{iv} NETL has published three reports. "Reliability, Resilience and the Oncoming Wave of Retiring Baseload Units, Volume II-A: Case Study: Organized Markets of the Eastern Interconnection," National Energy Technology Laboratory, Pittsburgh, April 19, 2019; "Reliability, Resilience and the Oncoming Wave of Retiring Baseload Units, Volume II-B: Electricity Generation Supply Chain in the Northeast," National Energy Technology Laboratory, Pittsburgh, April 19, 2019; and "Reliability, Resilience and the Oncoming Wave of Retiring Baseload Units, Volume II-C: Fuel-Electricity Interaction in the Northeast and Midcontinent," National Energy Technology Laboratory, Pittsburgh, April 19, 2019.

^v Ibid.

^{vi} EIA, *Electric Power Monthly*, February 2020, Tables 1.3.B and 1.4.B.

^{vii} Director of National Intelligence Dan Coats testified before the Senate Intelligence Committee that "China has the ability to launch cyberattacks that cause localized, temporary disruptive effects on critical infrastructure — such as disruption of a natural gas pipeline for days to weeks." U.S. Senate Select Committee on Intelligence hearing on "Worldwide Threats," January 29, 2019.