"Wyoming's Coal is Essential in Times of Crisis"

The U.S. Department of Homeland Security (DHS) has identified the "energy sector" as "uniquely critical" due to its role in providing an "enabling function" across all other critical sectors.

- During the March 16, 2020 White House release of "Coronavirus Guidelines for America: 15 Days to Slow the Spread," the President indicated that DHS identified critical infrastructure industries—such as the energy sector—as having "a special responsibility to maintain normal work schedules."
- DHS's March 28, 2020 guidance on "essential critical infrastructure" stressed that maintaining "functioning critical infrastructure" like the coal fleet is "imperative during the response to the COVID-19 emergency for both public health and safety as well as community well-being."

Because of its important role in "ensuring the reliability of the electrical system," DHS specifically identified the nation's coal fleet and its supply chain—coal production, rail and barge transportation, and equipment suppliers—as critical infrastructure necessary to help the nation respond to the COVID-19 pandemic.

- The coal fleet is a major part of the nation's energy sector. The coal fleet keeps electricity supplies both reliable and resilient, thus enabling the nation's public and private sectors to function.

During a crisis, it is essential to ensure that reliable and resilient supplies of electricity are available to help maintain a sense of normalcy and support critical functions. The coal fleet is one of our most reliable and resilient sources of electricity.

- A reliable electricity grid (power plants that produce electricity and the wires that deliver electricity) is one with minimal and short-term power interruptions. A resilient grid means a grid that is prepared to recover quickly from problems that could have extreme, even life threatening, consequences. Maintaining a reliable and resilient grid is critical so ensuring that critical infrastructure like hospitals, first responders, and other healthcare providers have the electricity they need 24/7.
- By maintaining a 75-day (or more) 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 reliability and resilience.

- A National Security Council memo stated that "… 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."
- The Department of Energy's National Energy Technology Laboratory (NETL), in analyzing how different electricity sources like coal, oil, natural gas, nuclear and renewables perform in extreme events, described coal as being the "most resilient form of [electricity] generation."
- During winter storms, coal-fired power plants have been disproportionately important to keeping the lights on while other electricity sources were curtailed. For example, more than 60 percent of incremental electricity demand during the Bomb Cyclone of 2018 was met by coal-fired power plants, while natural gas, wind, and solar power were faced with outages.

Coal is an essential component of Wyoming's electricity supply. The resilience of Wyoming's electricity supply depends on the coal fleet.

- There are 27 coal-fired generating units in Wyoming, totaling over 6,000 megawatts (MW) of electric generating capacity. All of the coal used in Wyoming power plants in 2019 was mined in Wyoming, and over 80 percent of the state's electricity generation came from coal.

Wyoming's coal is essential to the nation's coal fleet.

- Wyoming is the single largest supplier of coal in the country, supplying nearly half of all coal consumption. Wyoming coal is used by power plants in 26 states.
- In 2019, Wyoming supplied the majority of coal for power plants in 19 states: TX, MO, IL, WY, IA, GA, MI, AL, WI, AR, CO, NE, MN, KS, LA, OK, SD, NV, and OR.

Having a diverse fuel supply is important. However, given the recent uncertainty facing other energy sources, like oil and gas, maintaining reliable, stable and affordable coal supplies is more important than ever. Other fuel sources have vulnerable supply systems that coal, particularly coal mined in Wyoming, do not have.

- The North American Electric Reliability Corporation (NERC) assessed the potential threats to the grid posed by disruptions to natural gas pipelines and other parts of the natural gas delivery system. Their assessment listed at least 17 vulnerabilities that could interrupt the delivery of natural gas to power plants.
- One of these vulnerabilities is just-in-time gas delivery via pipeline because natural gas cannot be stored easily at power plant sites. (Coal-fired power plants stockpile enough coal on site to last, on average, for 75 days or more.)

- Additionally, NERC points out that in many cases, several gas-fired power plants are served by the same natural gas pipeline. Therefore, disruption of a single pipeline system could interrupt gas deliveries to multiple gas-fired power plants. (This vulnerability is referred to as a "single point of disruption.")
- Although coal-fired power plants typically keep a large stockpile of coal on-site, electricity generation increases during critical times, making it important to avoid temporarily disrupting the fuel supply chains to these "uniquely critical" facilities.
- National security expert Dr. Paul Stockton provided a number of recommendations about fuel security to PJM, one of the nation's regional grid operators. (Dr. Stockton served as an Assistant Secretary of Defense during the Obama Administration.) His comments highlighted the growing risks of overreliance on natural gas: "U.S. reliance on natural gas for power generation has been increasing along with adversary capabilities to attack pipelines and storage sites in the PJM region and beyond given the critical military installations and other national security facilities in the PJM service area, this area will be ground zero if Russia, China, or other potential adversaries launch comprehensive attacks to disrupt the flow of natural gas for power generation."

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