



PROTECT THE AMERICAN PEOPLE: MORATORIUM ON COAL PLANT CLOSURES ESSENTIAL

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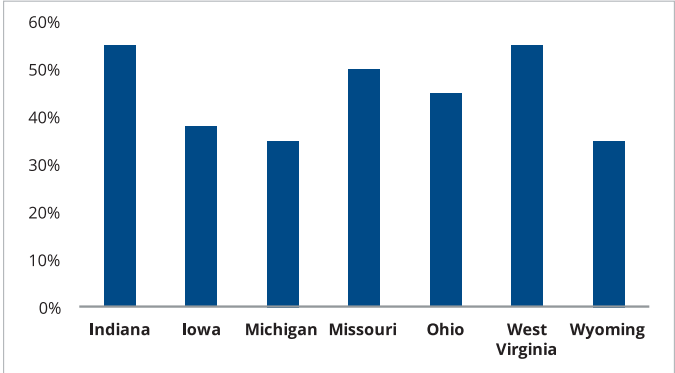
EXECUTIVE SUMMARY

Recent events in New England and elsewhere in the U.S. have demonstrated that **policies which hurt the U.S. coal fleet are placing the reliability, affordability, and security of America’s electric supply system at risk:**

- These policies will significantly increase wholesale electric rates – and could increase them by as much as 80 percent – according to Dr. Julio Friedmann, Assistant Secretary for Clean Coal at the U.S. Department of Energy (DOE).¹
- The increases will be especially harmful in certain states – such as Indiana, Iowa, Michigan, Missouri, Ohio, West Virginia, and Wyoming (Figure EX-1).
- Severe economic hardship will be imposed on people who can least afford it – low income families, minorities, children, and the elderly.

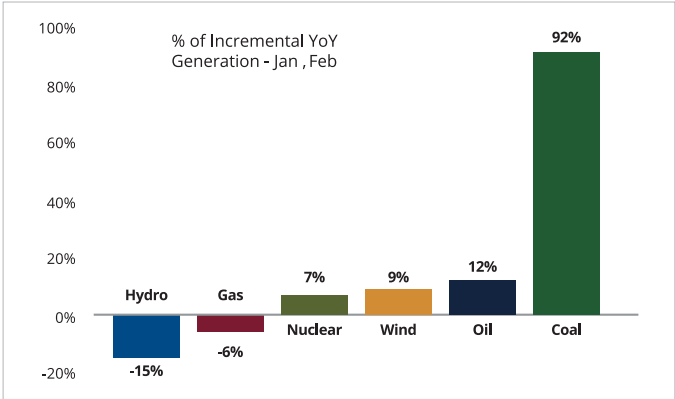
Therefore, policymakers, regulators, and electric utilities should institute an immediate moratorium on the premature closure of coal power plants and should reverse planned closures where possible.

Figure EX-1: Potential 2020 Electric Rate Increases From Coal Plant Closures



During the winter of 2014, coal was the only fuel with the ability to meet demand increases for electricity, providing 92 percent of incremental electricity in January/February, 2014 versus the same months in 2013² (Figure EX-2).

Figure EX-2: What Showed Up for Work During the Polar Vortex?

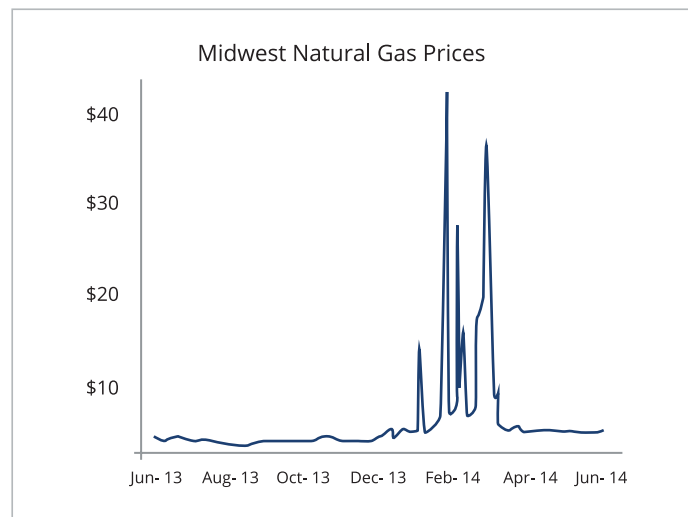


During the winter of 2013 - 2014:

- Businesses in New England and other parts of the U.S. were curtailed because of a lack of gas infrastructure.
- Natural gas power plants also had a problem getting fuel due to infrastructure issues and at one point many of them had to go offline.
- Gas-based electricity prices increased 1,000 percent as coal and oil plants scheduled for closure picked up the load.
- Without coal, parts of New England, the Midwest, and other regions would have experienced brownouts and blackouts that would have been economically disastrous and would have compromised public health and safety; in many instances it could have been life threatening.

This past winter demonstrated in real time the value of the existing coal fleet. Americans were harmed as the relentless cold indicated that prudent utility practices require large, baseload coal plants to stabilize the grid, keep society functioning, and maintain electricity availability. Many regions suffered; for example, in late January and early February 2014 some locations in the Midwest experienced gas prices as high as \$35/MMBtu, and the Chicago Citygate price exceeded \$40/MMBtu (Figure EX-3).

Figure EX-3: Chicago Citygate Natural Gas Prices, February 2013 – 2014 (Dollars per MMBtu)



Source: NGI nationalgasintel.com

Government policies that drive over-dependence on natural gas to replace baseload coal put the U.S. electric supply at risk and also endanger:

- The 60 million households who need gas for heating.
- A vast array of firms that use gas in daily operations.

Recent experience in New England and elsewhere represents a troubling indication of the implications of removing coal plants from the electricity generation mix:

- Spot prices of natural gas and electricity may spike significantly.
- Utility bills become unaffordable for many families during price spikes.
- Energy shortages could occur.
- What little industry is left in the Northeast may be forced to leave.
- Average electricity rates in New England are already more than 40 percent higher than the national average and may be headed to be 150 percent higher.
- New York's electricity prices are now the second highest in the country – only the geographically isolated state of Hawaii has higher prices.

New England is merely the precursor to the national problem which is emerging.

With the projected closure of 60 gigawatts (GW) of coal plant capacity, virtually the entire U.S. is rapidly reaching the brink of significantly higher prices for electricity and being unable to meet either the summer or winter peak demand for power. Unless immediate steps are taken to halt coal plant closures:

- Within the decade entire regions (New England, Florida, California, the Southwest) may be at risk.
- Vast areas of the American Heartland from the Southeast to the Plains could face the difficult choice of using gas for either electric power or meeting the heating needs of millions of families, businesses, and farms.
- Forecasts indicate that by 2020, natural gas capacity will exceed coal, nuclear, and hydro capacity *combined*, creating a lack of diversity of supply issue.

The American Public Power Association has demonstrated the difficulties of replacing coal in electricity generation, and found that there must be continued reliance on America's largest energy resource:

- The U.S. has by far the world's largest coal supply, nearly 30 percent of the global total.
- Most existing coal-fueled power plants are less expensive than natural gas for electricity generation.
- The U.S. Energy Information Administration (EIA) forecasts that coal's price advantage will continue and grow larger for the next three decades.
- U.S. coal used for electricity generation has increased 170 percent since 1970 as key emission rates (SO₂, NO_x, PM₁₀) have been reduced by 90 percent.³ Greater use of advanced technologies will continue this progress.
- Advanced "supercritical" technology is highly efficient, and other state-of-the-art technologies result in a key emissions rate that is two-thirds lower than the existing fleet with carbon dioxide (CO₂) emission rates as much as 25 percent lower than the oldest plants.⁴

Current policies are driving reduction of coal generation creating increased dependence on natural gas. However, activist groups and government officials have indicated their desire to reduce natural gas usage as well.

- Activist groups supporting the “Beyond Coal” campaign have initiated a “Beyond Natural Gas” campaign to oppose hydraulic fracturing.⁵
- Department of Energy Secretary Ernest Moniz contends that natural gas is “too carbon intensive” and must be phased out of electricity generation by 2050.⁶
- White House Senior Counselor John Podesta has endorsed the phase-out of natural gas in the electric power sector beginning in 2020.⁷
- Ronald Binz, recent nominee to chair the Federal Energy Regulatory Commission (FERC), said of gas: “On a carbon basis, you hit the wall in 2035 or so with gas. I mean, you do. And it’s certainly helping my state [Colorado]...but we also have to understand that without [carbon capture and storage], I think that’s a dead end, a relative dead end – it wouldn’t dead end until 2035 or so – but that’s when we’re going to have to do better on carbon than even natural gas can do.”⁸

Current policies for electrical generation threaten the abundant, reliable and affordable electricity Americans have come to rely upon; they drive coal out as a source of electrical generation, creating heavy reliance on natural gas. In the next phase, natural gas will be driven out as well. This will affect natural gas availability for direct use and power, making electricity more expensive and scarce to Americans and hurting economic growth.

In sum, policies that erode the U.S. coal fleet are placing the reliability, affordability, and security of America’s electric supply system at risk. Prudence requires an immediate moratorium on coal power plant closures and planned closures should be reversed where possible.

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