America is Shoveling Coal to the Sidelines

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NEW YORK (AP) — America is shoveling coal to the sidelines.

The fuel that powered the U.S. from the industrial revolution into the iPhone era is being pushed aside as utilities switch to cleaner and cheaper alternatives.

The share of U.S. electricity that comes from coal is forecast to fall below 40 percent for the year, its lowest level since World War II. Four years ago, it was 50 percent. By the end of this decade, it is likely to be near 30 percent.

"The peak has passed," says Jone-Lin Wang, head of Global Power for the energy research firm IHS CERA.

Utilities are aggressively ditching coal in favor of natural gas, which has become cheaper as supplies grow. Natural gas has other advantages over coal: It produces far fewer emissions of toxic chemicals and gases that contribute to climate change, key attributes as tougher environmental rules go into effect.

Natural gas will be used to produce 30 percent of the country's electricity this year, up from 20 percent in 2008. Nuclear accounts for 20 percent. Hydroelectric, wind, solar and other renewables make up the rest.

The shift from coal is reverberating across Appalachia, where mining companies are laying off workers and cutting production. Utilities across the country are grappling with how to store growing piles of unused coal. And legal disputes are breaking out as they try to cancel contracts and defer deliveries.

— Mining company Alpha Natural Resources of Bristol, Va., plans to produce 11.5 million fewer tons of coal this year, a decline of 11 percent, because so many customers have requested deferrals. The company has announced that 12 mining operations in Kentucky and West Virginia will be idled or slowed, and 353 jobs cut.

— Patriot Coal, a mining company based in St. Louis, closed a mine in Kentucky, idled several others in Kentucky and West Virginia, and has cut 1,000 jobs. The company's stock has fallen below $2, down from nearly $25 a year ago, and the company's CEO, Richard Whiting, was replaced at the end of May.

— GenOn, a wholesale power producer based in Houston, has invoked a legal clause typically used after natural disasters to try to stop suppliers from delivering more coal to already overloaded plants. "We just can't physically take it right now," says GenOn CEO Edward Muller.

Coal has dominated the U.S. power industry for so long because it's a cheap and abundant domestic resource. The U.S. is the world's second-largest coal producer

after China, and it has the world's biggest reserves — enough to last more than 200 years.

Coal has also enjoyed strong political support because of the jobs it provides in mining and transportation. That helped coal thrive even as environmental concerns over mining practices and air quality grew.

Just five years ago, coal was flourishing in the U.S. With electricity demand and the price of natural gas both rising, coal was viewed as essential to keeping power costs under control. Utilities drew up plans to build dozens of coal-fired plants.

But around the same time, a revolution was under way in the natural gas industry. Drillers figured how to tap enormous deposits of previously inaccessible reserves. As supplies grew and the price of natural gas plummeted, the ground shifted under the electric-power industry.

Now coal is being beaten at its own game. Natural gas has become a cheap and abundant domestic resource, too. And it is more environmentally friendly.

Power plants that burn coal produce more than 90 times as much sulfur dioxide, five times as much nitrogen oxide and twice as much carbon dioxide as those that run on natural gas, according to the Government Accountability Office, the regulatory arm of Congress. Sulfur dioxide causes acid rain; nitrogen oxides cause smog; and carbon dioxide is a so-called greenhouse gas that traps heat in the atmosphere.

A pair of clean air rules enacted by the Environmental Protection Agency over the past year tightens limits on power-plant emissions of sulfur dioxide and nitrogen dioxide, and place new limits on mercury, a poison found in coal. This will force between 32 and 68 of the dirtiest and oldest coal plants in the country to close over the next three years as the rules go into effect, according to an AP survey of power plant operators conducted late last year.

Coal was hit with a potentially bigger environmental blow in March when the EPA issued guidelines that could limit greenhouse gas emissions from new power plants as early as 2013. Once the guidelines go into effect, no coal plants will be built unless utilities can develop a cost-effective way to capture carbon dioxide, analysts say. That technology has been slow to develop and is very expensive.

"Even without the EPA rules, coal is not really competitive," Wang says.

Coal executives are hardly giving up. Nick DeIuliis, President of Consol Energy, a coal and natural gas producer based in Canonsburg, Pa., doubts the EPA's restrictions on greenhouse gases will survive long term because of the economic harm he says they will inflict.

Consol and other U.S. coal companies hope to be able to keep mines active by exporting more of the country's huge reserves. Last year U.S. coal exports hit a record 107 million short tons. High grade coal that is used to make steel is in

particular demand in developing countries such as China, India and Brazil.

DeIuliis says the price of natural gas will rebound over time and that coal will once again account for half the nation's electricity. "This is a cycle," he says.

The futures price of natural gas hit a 10-year low of $1.91 per thousand cubic feet in April. It closed Monday at $2.22 but would have to more than double from there to convince utilities that have a choice of fuels to return to coal whenever possible.

Utilities are forecast to burn 796 million tons of coal this year, a 14 percent decline from last year and the fewest tons since 1992, according to Energy Department data.

Demand for coal has fallen even faster than the environmentalists who have been lobbying against coal had anticipated.

Bruce Nilles, director of the Sierra Club's Beyond Coal campaign, says the shift was accelerated by the low price of natural gas. That, along with tougher environmental rules and alternatives such as wind and solar will keep the pressure on coal. "We won't go backwards," he says.

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