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Ontario Phases Out Coal-Fired Power

All the province's coal-burning power plants will be shuttered by 2014, making the Canadian province the first coal-free jurisdiction in North America

By Christa Marshall and ClimateWire | Friday, January 11, 2013 | 6 comments

By the end of the year, Ontario will become the first jurisdiction in North America to shut down almost its entire coal fleet.

Yesterday, the province announced that its last two large coal units will close before 2014, making more than 99 percent of the province's electricity generated from non-coal sources. It is a major shift for Ontario, which fired 25 percent of its grid from coal a decade ago.

"Today, all Ontarians can breathe a little easier," said Ontario Premier Dalton McGuinty in a statement.

The two units slated for shutdown by the end of the year are the Lambton Generating Station and the Nanticoke Generating Station, which at its peak capacity of near 4,000 megawatts was one of the largest coal facilities in the world.

The closings are a result of a McGuinty plan to fight smog and pollution via coal plant closures launched in 2003, the year of his election. With yesterday's announcement, 17 of 19 original coal-fired units will have been shut down, the government said.

The only remaining plant is a small backup generator, said Tim Weis, an analyst at the Pembina Institute, an environmental think tank. It will close in 2014, he said.

Several dynamics made the efficient phaseout of coal possible, he said. The province owns its coal generating units, giving it significant power to determine the power mix, he explained.

Wind, natural gas filling the gap

To prepare for the coal phaseout, McGuinty introduced an aggressive energy law in 2009 establishing energy efficiency programs and a feed-in tariff providing generous financial benefits to renewable developers. Those efficiency programs have helped make Ontario one of the few jurisdictions in the world where energy demand is declining, rather than increasing, Weis said.

"This shows it is possible to do this in a jurisdiction with big electricity consumption," he said.

The 2009 law has not been without controversy -- and was recently challenged before the World Trade Organization -- but it has boosted the ability of renewable power to step in for coal, according to Weis.



WAR ON COAL: Ontario will shut down all of its coal-fired power plants. Pictured: Lambton generating station in Ontario. *Image: Flickr/Toban B.*

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Wind power has grown from 400 MW of provincial power six years ago to more than 2,000 MW now. By 2030, it is projected to provide roughly 10 percent of the province's electricity supply, despite having been a non-player in 2003.

Additionally, new natural gas plants are supplying much of the power formerly provided from coal generation, Weis said.

According to the Pembina Institute, the greenhouse gas emissions from Ontario's electricity sector have fallen from 40 million tons to 10 million tons over the past decade because of the coal plant closings.

The coal ban runs a risk of eventually raising electricity prices, said Dave Butler, executive director of the Canadian Clean Power Coalition, which represents electricity producers. It also could have an immediate effect on jobs, considering that several hundred workers are employed at Nanticoke and Lambert, he said.

U.S. impact minimal

It likely would not affect the U.S. coal industry, even though much of Ontario's former coal supply came from south of the border, he said.

"Ontario's decision in the context of the United States is minor," he said. "The U.S. industry has other assets."

Ontario's plans likely would not change the dynamic in other provinces, he said. They will be influenced much more by national coal regulations announced last year, and the province's own rules, he said.

The Canadian national regulations go a step further than U.S. EPA rules in requiring existing coal plants to eventually match the greenhouse emissions profile of natural gas plants -- a requirement that can only be met via yet-to-be-proved carbon capture technology (*ClimateWire*, Sept. 6, 2012).

Coal fires a much lower percentage of electricity in Canada -- roughly 16 percent -- than in the United States. Most remaining coal plants are concentrated in three provinces: Alberta, Saskatchewan and Nova Scotia.

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