

Documents raise questions about costs to retire Ontario's natural gas power plants

By Matthew McClearn, Globe and Mail Apr. 16, 2022

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Retiring Ontario's natural gas-fired power plants would be cheaper than official estimates released last fall, critics say, adding that they believe the government suppressed the publication of modelled scenarios that would have supported closing the carbon-intensive facilities.

The Independent Electricity System Operator (IESO) published a report in October that concluded that retiring the province's natural gas plants by 2030 would cause the average homeowner's monthly electricity bill to spike \$100, or 60 per cent. Moreover, the province would experience "frequent and sustained blackouts." The report, a response to demands from more than 30 municipalities to phase out Ontario's natural gas fleet, dismissed the idea as impossible.

Earlier drafts of that report, obtained by the Ontario Clean Air Alliance under the province's Freedom of Information and Protection of Privacy Act and supplied to The Globe and Mail, considered possibilities beyond a rapid phase-out. One envisioned a scenario in which carbon prices would rise from \$50 per tonne this year to \$170 per tonne by 2030, consistent with federal targets. That would cause gas utilization to fall and see Ontario import more electricity from its neighbours. Reliability would be unaffected, and costs recovered from ratepayers would increase by about \$1-billion (3 per cent) a year.

Another scenario saw Ontario meeting its generation needs with a mix of energy storage, increased energy efficiency and additional wind capacity; in this scenario, the IESO predicted that costs recovered from ratepayers would actually decrease by about \$2-billion, or 8 per cent.

Neither scenario was included in the published final version.

"They were just deleted," said Jack Gibbons, chair of the Ontario Clean Air Alliance, which has long advocated phasing out Ontario's natural gas plants. "If these scenarios had been published, then people would have said: Okay, well, we can achieve a gas power phase-out at a very low cost.

"We believe there was political interference," he said.

Asked specifically about that allegation, the IESO did not respond directly.

In a statement, it said its planning team stopped working on the scenarios because they didn't speak to communities' demands for a phase-out. "Preliminary work on these additional scenarios did not include many important components that would have materially impacted the final outcomes," it added.

Ontario has about 50 natural gas-fired power plants, located mostly around Toronto and Southwestern Ontario, accounting for more than a quarter of total generation capacity. Some of them are able to start up and shut down within minutes; currently, they're used to generate electricity on days of peak demand, such as hot summer days when many people have air conditioners running. According to IESO statistics, the plants supplied only 9 per cent of the province's electricity last year.

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But Ontario is expected to rely more heavily on natural gas plants when the Pickering Nuclear Generating Station is retired by 2025 and as other reactors are taken offline for refurbishment between now and the 2030s. The natural gas plants are the only generating facilities in the province that produce significant greenhouse gas emissions – the last coal-fired power plant was shut down in 2014 – so firing them up more frequently would cause overall emissions from power generation to rise considerably, even as the federal government commits to dramatic reductions in national emissions.

Last year, Toronto city councillors joined other municipalities in calling on the province to phase out the natural gas plants. A January, 2021, motion said current plans would "throw away more than a third of the greenhouse gas reductions Ontario achieved by phasing out its dirty coal-fired power plants."

Like the final version of the IESO's report, earlier drafts pointed to challenges associated with early retirement of the natural gas fleet. Among them: Many of the facilities are relatively new and still under long-term contracts, so Ontario would have to compensate owners.

Moreover, the ability of natural gas-fired plants to ramp up and down makes them useful in certain situations, such as mornings when demand surges or during a wind "cutout," when wind turbines abruptly cease generating. Some plants were built near demand centres to avoid the need for costly new transmission infrastructure, something that's not always possible with renewables.

Natural gas plants can also come in handy after blackouts, the IESO asserted. Restoring power requires "strategically placed generating units with significant load pickup capability" – a quality that could be difficult to replace with emerging technologies, which are "generally unproven."

Mr. Gibbons said the IESO inflated its cost estimates for phasing out natural gas by selecting some of the most expensive alternatives, such as building a new nuclear power plant in the Toronto area.

“They chose a high-cost mix in an attempt to justify Doug Ford’s plan to ramp up the greenhouse gas pollution at the gas plants by more than 600 per cent,” he said.

David Butters, chief executive officer of the Association of Power Producers of Ontario, said that, when Ontario was shuttering its coal-fired plants, natural gas was among the only technologies available that could replace coal’s ability to ramp up and down quickly.

While noting that natural gas does produce greenhouse gas emissions, Mr. Butters said Ontarians need to consider the province’s total annual emissions – and the small portion that comes from the electricity sector.

“We have a much bigger job at hand, and that is to get to net zero by 2050,” he said. “We have to start focusing on the sectors of the economy where the biggest emissions come from: transportation and buildings, primarily.”

Responding to the IESO’s report, Ontario’s Ministry of Energy asked the IESO in October to evaluate a moratorium on new gas-fired plants within the province. That report is due by November.