

Intelligence MEMOS



From: Grant Bishop and Blake Shaffer

To: Greg Rickford, Ontario Minister of Energy, Northern Development and Mines

Date: April 21, 2020

Re: **AS ELECTRICITY DEMAND SINKS, ONTARIO POWER COSTS RISE 24 PERCENT WITH MORE TO COME**

Many Ontario businesses can expect a surge in their power bills even with the pandemic driven fall in demand and real-time wholesale prices for electricity.

These effects are due to the poor design of Ontario's electricity market. Ontario's government must both (1) take immediate steps to mitigate power costs for Ontario industry and (2) move decisively to reform power pricing.

The current price spike results from the costs of paying guaranteed prices under long-term contracts with many power producers. These costs are bundled into the so-called "Global Adjustment," which is based on settlements at the end of each month (i.e., the difference between guaranteed prices and what generators earn in the wholesale marketplace). The total Global Adjustment is then spread across Ontario's overall electricity load and charged on a per megawatt hour (MWh) basis.

Perversely, a fall in power demand causes higher rates per MWh for Ontario consumers to fund the Global Adjustment. The present crisis will accelerate the vicious cycle of burgeoning power costs for Ontario businesses. As the shutdown continues, Ontario must now urgently confront the burden from the Global Adjustment and its costly long-term power contracts.

The total cost for energy in Ontario is the sum of the wholesale market price – the Hourly Ontario Energy Price (HOEP) – and the Global Adjustment. As illustrated in Figure 1, this total energy cost increased to \$133/MWh in March, a 24 percent year-over-year increase. For comparison, the demand-weighted average price in Alberta's power market for the first quarter of 2020 was \$70/MWh.

The component propelling the March increase was the Global Adjustment, which increased to \$119/MWh, [climbing](#) by five percent from February and 50 percent relative to March 2019 (see Figure 1). The preliminary estimate for April projects a further 15 percent month-over-month increase to \$137/MWh.

These escalating power costs for Ontario consumers are driven by high-cost policies. Earlier Ontario governments entered into contracts for guaranteed prices for renewable energy resources and natural gas generation capacity. Many of these contracts have terms of 20 years or more.

Such guaranteed prices encourage generation whether power is needed or not. Indeed, for a significant number of hours, the wholesale HOEP dips negative. In 2019, HOEP was negative for 10 percent of all hours. In those hours, consumers and exporters are effectively paid to take Ontario's electricity. Nonetheless, whatever the HOEP during a given month, the bill for paying the guaranteed prices comes due at month's end with a retroactive monthly charge for each MWh of Ontario demand.

With increasing energy efficiency and the ongoing slump in manufacturing, Ontario's electricity consumption has dwindled over past years. This contributed to escalating Global Adjustment costs. Plunging power demand during this crisis will exacerbate these costs.

Ontario's power usage declined in the final weeks of March and this fall has continued into April. Ontario power demand for March 2020 was six percent lower than March 2019. For the week ending April 11, power demand was 12 percent lower than the same week in 2019. The C.D. Howe Institute's [dashboard](#) provides daily tracking of Ontario's power demand and exhibits the level relative to the same week and weekday in previous years.

Notably, despite the recent year-over-year decline in Ontario power demand, power generation has actually increased relative to the same week last year (see Figure 2). In the first two weeks of April, the HOEP has declined to roughly \$5/MWh from \$13/KWh in March. However, incited by contracts with guaranteed prices, generators continue to push power onto Ontario's grid. As a result, Ontario power consumers are subsidizing exports to their neighbours.

The rising Global Adjustment will inflict mounting rates on many power consumers – just as they are struggling to make payments for other costs. But not all Ontario consumers will face the same impact on rates.

With fixed time-of-use [rates](#), many residential and small business consumers are currently insulated from these costs. As well, the Industrial Conservation Initiative (the so-called "High-5" program) allows certain large industrial facilities (so-called "Class A" consumers) to escape the Global Adjustment.

However, while reducing Global Adjustment costs for many Class A consumers, the High-5 program shifts a greater funding burden to other businesses categorized as [Class B](#) consumers. In 2019, Class A customers avoided 37 percent of the Global Adjustment allocation. As a result, the average Global Adjustment rate in 2019 was roughly \$59/MWh for Class A consumers while Class B consumers paid around \$107/MWh.

If generators keep producing power under contract despite plunging demand, skyrocketing Global Adjustment rates will exacerbate the financial challenges facing many Ontario businesses. Ontario's power market is overdue for extensive surgery, but the government must first address today's hemorrhage.

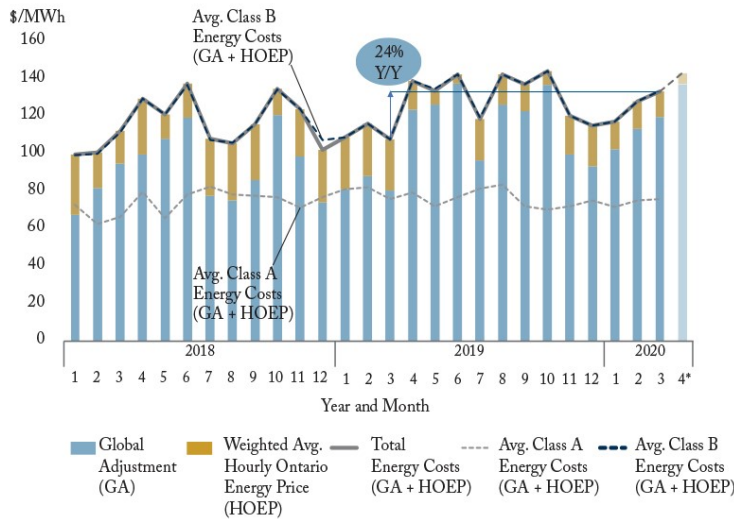
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Figure 1

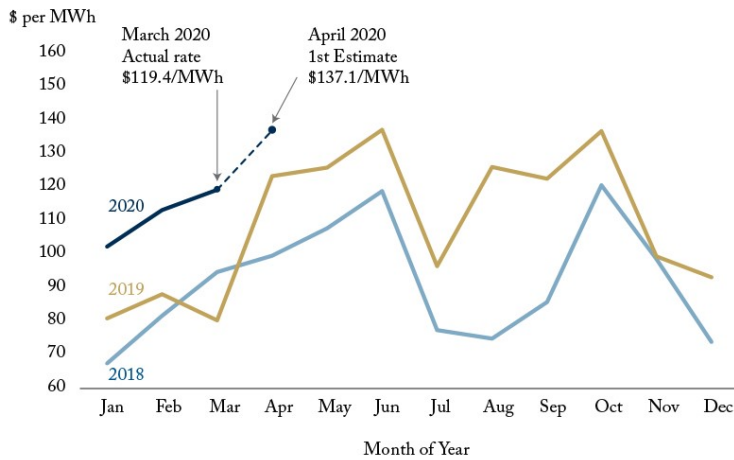
Burgeoning Energy Costs for Ontario Power Consumers



* Projection for April 2020 based on 1st estimate of Global Adjustment and avg. HOEP (weighted by market demand) for April 1 to 15.
Source: Ontario Independent Electricity System Operator (IESO).

Figure 2

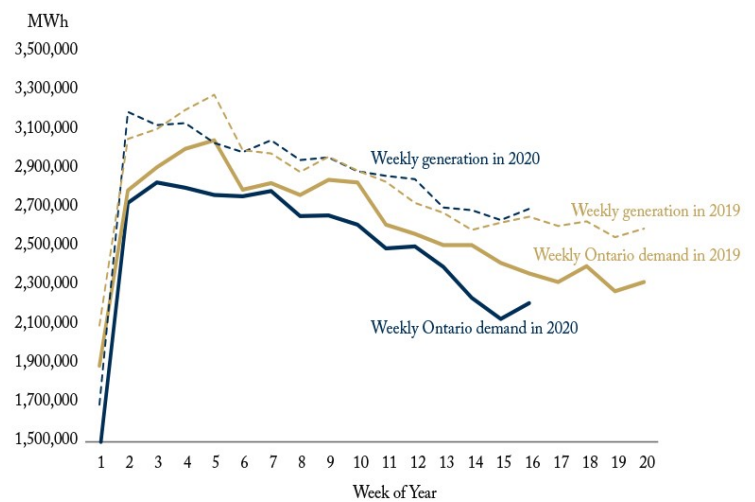
Monthly Global Adjustment Rate for 2018 to 2020



Source: Ontario Independent Electricity System Operator (IESO).

Figure 3

Weekly Ontario Demand and Supply for Electricity in 2019 and 2020 (Year-to-Date)



Source: Ontario Independent Electricity System Operator (IESO).