



# **A Financial Review:**

# The Decision to Freeze Time-of-Use Electricity Pricing



# **Highlights**

- In response to the COVID-19 outbreak, the Province lowered the cost of electricity for residential and some commercial (mainly small businesses and farms) customers by suspending time-of-use (TOU) electricity pricing. From March 24, 2020 until May 31, the price of electricity has been set at the lowest "off-peak" rate of 10.1 c/kWh.
- The suspension of TOU pricing will reduce the average price paid for electricity by 3.0 c/kWh for approximately 4.7 million residential ratepayers and 2.6 c/kWh for 400,000 commercial ratepayers.
- The FAO estimates that the suspension of TOU pricing will save a typical residential ratepayer a total of \$34 from March 24 to May 31, while a typical commercial ratepayer will save a total of \$98.
  - These savings estimates account for the increase in residential electricity consumption and the decrease in commercial electricity consumption that resulted in response to the COVID-19 outbreak containment measures.
- The suspension of TOU pricing to May 31 will cost the Province \$175 million. Of the \$175 million cost, \$138 million will subsidize residential ratepayers and \$37 million will subsidize commercial ratepayers.
  - In total, including the suspension of TOU pricing and the Province's existing electricity subsidy programs, the Province is now projected to spend \$5.8 billion in 2020-21 subsidizing electricity prices.
- Looking ahead, after May 31, the Province may consider extending the suspension of TOU pricing given that most COVID-19 containment measures currently remain in place.
  - The FAO estimates that extending the suspension of TOU pricing to August 31 would cost an additional \$316 million for a total of \$491 million.
  - Extending the TOU pricing suspension to December 31 would cost a total of \$849 million and to March 31, 2021 would cost a total of \$1.1 billion.

#### Cost to Province of extending TOU pricing suspension (\$ millions)

TOU Suspension	Incremental Cost	Total Cost
March 24 to May 31, 2020	175	175
Extend to August 31, 2020	316	491
Extend to December 31, 2020	358	849
Extend to March 31, 2021	285	1,133
Source: FAO.		

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## Introduction

On March 24, 2020, in response to the COVID-19 outbreak, the Government of Ontario (the Province) announced that it would reduce the cost of electricity for residential and some commercial (mainly small businesses and farms) customers by temporarily suspending time-of-use (TOU) electricity pricing. Under TOU pricing, ratepayers are charged a different price for electricity depending on the time of day and day of the week. With the suspension of TOU pricing, the price of electricity was set at the lowest "off-peak" rate of 10.1 cents-per-kilowatt-hour (c/kWh). At the time of the announcement, the suspension was for a period of 45 days, but the suspension has been extended for an additional 24 days until May 31.<sup>2</sup>

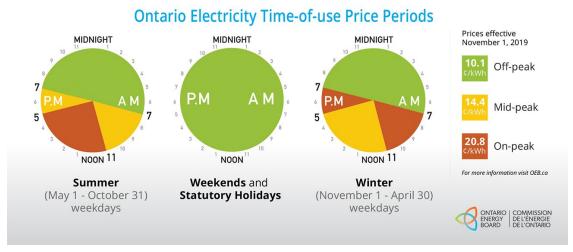
The purpose of this report is to:

- explain TOU electricity pricing in Ontario;
- estimate electricity bill savings for residential and commercial ratepayers; and
- project the cost to the Province from suspending TOU pricing.

# What is TOU Pricing?

The price of electricity for most residential and some commercial customers (or ratepayers) in Ontario is set on what is known as a time-of-use (TOU) basis.<sup>3</sup> This means that the rate charged to ratepayers for the consumption of electricity varies based on when the electricity is consumed. TOU pricing in Ontario has three price tiers, off-peak (10.1 c/kWh), mid-peak (14.4 c/kWh) and on-peak (20.8 c/kWh). The mid-peak and on-peak price tiers are active on weekdays between 7:00 a.m. and 7:00 p.m.<sup>4</sup> At all other times, including weekends and statutory holidays, the off-peak price is charged.

#### Electricity time-of-use price periods in Ontario



Source: Ontario Energy Board.

<sup>&</sup>lt;sup>1</sup> https://news.ontario.ca/opo/en/2020/03/ontario-providing-electricity-relief-to-families-small-businesses-and-farms-during-covid-19.html.

<sup>&</sup>lt;sup>2</sup> https://news.ontario.ca/opo/en/2020/05/ontario-extends-electricity-rate-relief-during-covid-19.html.

<sup>&</sup>lt;sup>3</sup> There are approximately 4.7 million residential ratepayers and over 400,000 commercial ratepayers that participate in TOU electricity pricing. <sup>4</sup> From May 1 until October 31, mid-peak is from 7:00 a.m. until 11:00 a.m. and then 5:00 p.m. until 7:00 p.m. On-peak is from 11:00 a.m. until 5:00 p.m. On-peak is from 7:00 a.m. until 11:00 a.m. and then 5:00 p.m. until 7:00 p.m. until 7:00 p.m.



# Why Does the Province Have Time-of-Use Pricing?

Electricity bills in Ontario have three components: electricity, delivery and regulatory charges. TOU pricing affects the electricity portion of customer bills, which is the charge to recover the cost of generating electricity. In general, electricity generation is more expensive during the daytime on weekdays when demand for electricity in Ontario is highest. TOU pricing was introduced by the Province to better align the cost of generating electricity with the time the electricity is consumed by ratepayers. TOU pricing also provides an incentive for ratepayers to shift their consumption of electricity to off-peak time periods when the cost of generating electricity is lower.

Overall, prior to the COVID-19 outbreak, a typical time-of-use ratepayer consumed 64 per cent of their electricity during off-peak hours and 18 per cent in each of the mid-peak and on-peak hours. As a result, prior to the COVID-19 outbreak, ratepayers were paying 12.8 c/kWh on average for electricity generation.

#### Price of electricity with TOU pricing

	Off-peak (64%)	Mid-peak (18%)	On-peak (18%)	Average Price Paid
Price (c/kWh)	10.1	14.4	20.8	12.8
O-ti- F D	1540			

Source: Ontario Energy Board and FAO.

# How Does Suspending TOU Pricing Affect the Price of Electricity for Ratepayers?

During the suspension of TOU pricing, all electricity consumed by time-of-use ratepayers will be charged the off-peak price of 10.1 c/kWh. This means that the price of electricity consumed during mid-peak hours will be reduced by 4.3 c/kWh and the price of electricity consumed during on-peak hours will be reduced by 10.7 c/kWh.

As noted above, prior to the COVID-19 outbreak, the average price for electricity paid by ratepayers was 12.8 c/kWh, which implies an average price reduction of 2.7 c/kWh. However, during the COVID-19 outbreak, more households are at home during the day which has led to an overall increase in electricity demand from residential ratepayers, especially during the on-peak and mid-peak hours of the day. As a result, the FAO estimates that under TOU pricing, the average price paid by residential ratepayers would have been 13.1 c/kWh. This implies an average price reduction for residential ratepayers of 3.0 c/kWh.

#### Residential electricity price change from TOU pricing suspension, March 24 to May 31 (cents per kilowatt hour)

	Off-peak (60%)	Mid-peak (20%)	On-peak (20%)	Average Price Paid
Price of Electricity with TOU Pricing	10.1	14.4	20.8	13.1
Price of Electricity with TOU Pricing Suspended to Off-Peak Rate	10.1	10.1	10.1	10.1
Price Reduction	0	4.3	10.7	3.0
Source: FAO.				





In contrast, during the COVID-19 outbreak, non-residential electricity demand (and total Ontario electricity demand) has decreased. The decrease in non-residential electricity demand is greater during the mid-peak and on-peak hours of the day. <sup>5</sup> As a result, the FAO projects that the suspension of TOU pricing will result in an average price reduction of 2.6 c/kWh for commercial ratepayers.

# How Much Will Ratepayers Save?

## Typical residential ratepayer bill impact

From March 24 to May 31, the FAO estimates that a typical residential ratepayer will save a total of \$34 due to the suspension of TOU pricing. This estimate accounts for the change in residential consumption that has resulted from households remaining at home during the COVID-19 outbreak.<sup>6</sup>

The elimination of TOU pricing will save a typical residential ratepayer \$42 on their pre-tax bill. However, residential ratepayers also receive a 32 per cent subsidy on their pre-tax bill (including electricity, delivery and regulatory) through the Ontario Electricity Rebate. Consequently, as the price of electricity is reduced through the suspension of TOU pricing, the benefit from the Ontario Electricity Rebate is also lowered, resulting in a net electricity bill savings to the average residential ratepayer of approximately \$34.7

#### Typical residential ratepayer electricity bill impact (March 24 to May 31), (\$)

Charges	With TOU	No TOU	Savings
Electricity			
Off-Peak	88	88	0
Mid-Peak	41	29	12
On-Peak	58	28	30
Total Electricity Charge	187	145	42
Delivery	115	115	0
Regulatory	6	6	0
Total Charges (pre-tax)	309	267	42
HST	40	35	5
Ontario Electricity Rebate	-98	-85	-13
Total Electricity Bill	251	217	34

Note: Based on 1,440 kWh of electricity consumption. The fixed portion of delivery charges has been prorated to cover 69 days. Source: FAO.

<sup>&</sup>lt;sup>5</sup> Based on FAO analysis of Independent Electricity System Operator (IESO) power data.

<sup>&</sup>lt;sup>6</sup> The FAO estimates residential mid-peak demand has increased by 14 per cent, on-peak demand has increased by 12 per cent and overall demand has increased by 4.6 per cent for the period from March 24 to May 31.

<sup>&</sup>lt;sup>7</sup> The net electricity bill savings to residential ratepayers also accounts for a \$5 reduction in HST payments.



### Typical commercial ratepayer bill impact

The suspension of TOU pricing will also benefit over 400,000 commercial ratepayers, which includes mostly small businesses and farms. The FAO estimates that a typical commercial ratepayer will save \$98 from the suspension of TOU pricing from March 24 to May 31. This estimate accounts for the decrease in commercial ratepayer electricity consumption that has resulted from the COVID-19 outbreak.<sup>8</sup>

The elimination of TOU pricing will save a typical commercial ratepayer \$121 on their pre-tax bill. However, commercial ratepayers also receive a 32 per cent subsidy on their pre-tax bill (including electricity, delivery and regulatory) through the Ontario Electricity Rebate. Consequently, as the price of electricity is reduced through the suspension of TOU pricing, the benefit from the Ontario Electricity Rebate is also lowered, resulting in a net electricity bill savings to the average commercial ratepayer of approximately \$98.9

#### Typical commercial ratepayer electricity bill impact (March 24 to May 31), (\$)

Charges	With TOU	No TOU	Savings
Electricity			
Off-Peak	321	321	0
Mid-Peak	114	80	34
On-Peak	169	82	87
Total Electricity Charge	604	483	121
Delivery	333	333	0
Regulatory	20	20	0
Total Charges (pre-tax)	957	836	121
HST	124	109	15
Ontario Electricity Rebate	-304	-266	-38
Total Electricity Bill	777	679	98

Note: Based on 4,786 kWh of electricity consumption. The fixed portion of delivery charges has been prorated to cover 69 days. Source: FAO.

# What is the Cost to the Province from Suspending TOU Pricing?

From March 24 to May 31, the differences between the mid-peak and on-peak TOU prices and the off-peak price paid by residential and commercial ratepayers will be financed by the Province. The FAO estimates that the suspension of TOU pricing will cost the Province \$175 million. This estimate is the net cost to the Province

<sup>&</sup>lt;sup>8</sup> The FAO estimates that commercial electricity demand has decreased by 11 per cent.

<sup>&</sup>lt;sup>9</sup> The net electricity bill savings to commercial ratepayers also accounts for a \$15 reduction in HST payments.





after accounting for the interaction with the Ontario Electricity Rebate. <sup>10</sup> In total, including the suspension of TOU pricing and the Province's existing electricity subsidy programs, the Province is projected to spend \$5.8 billion in 2020-21 subsidizing electricity prices. <sup>11</sup>

Of the \$175 million net cost to the Province, \$138 million will subsidize residential ratepayer electricity costs and \$37 million will subsidize commercial ratepayer electricity costs.

#### Allocation of the subsidy from the suspension of TOU pricing, March 24 to May 31 (\$ millions)

Type of Customer	Subsidy
Residential	138
Commercial	37
Total	175
Source: FAO.	

Looking ahead, after May 31, the Province may consider extending the suspension of TOU pricing given that most COVID-19 containment measures currently remain in place. <sup>12</sup> The FAO estimates that extending the suspension of TOU pricing to August 31 would cost an additional \$316 million for a total cost to the Province of \$491 million. Electricity demand in Ontario is higher in the summer months compared to the spring; therefore, the incremental cost of suspending TOU pricing will begin to increase after May 31.

Finally, if the Province were to extend the TOU pricing suspension through to December 31, the FAO estimates that it would cost a total of \$849 million, and, if the TOU pricing suspension were to last until March 31, 2021, it would cost the Province a total of \$1.1 billion.

#### Cost to Province of extending TOU pricing suspension (\$ millions)

TOU Suspension	Incremental Cost	Total Cost
March 24 to May 31, 2020	175	175
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Extend to December 31, 2020	358	849
Extend to March 31, 2021	285	1,133
Source: FAO.		

<sup>&</sup>lt;sup>10</sup> As noted in the section above, the suspension of TOU pricing lowers the benefit to ratepayers from the Ontario Electricity Rebate. The FAO estimates that the suspension of TOU pricing will cost the Province \$257 million but will save the Province \$82 million from lower Ontario Electricity Rebate payments, resulting in a net cost of \$175 million. In addition, the suspension of TOU pricing will result in a loss of \$21 million in provincial HST revenue. The loss of \$21 million in HST revenue is not included in the \$175 million net cost to the Province.

<sup>&</sup>lt;sup>11</sup> In the 2020-21 Expenditure Estimates, the Ministry of Energy, Northern Development and Mines requested \$5.6 billion for its existing electricity subsidy programs.

<sup>&</sup>lt;sup>12</sup> As of May 17, the Province announced that Stage 1 of Phase 2 of its plan to reopen Ontario would begin on May 19. See: https://news.ontario.ca/opo/en/2020/05/ontario-announces-additional-workplaces-that-can-reopen.html and Government of Ontario, "A Framework for Reopening our Province," April 27, 2020.

# **About this Document**

Established by the Financial Accountability Officer Act, 2013, the Financial Accountability Office (FAO) provides independent analysis on the state of the Province's finances, trends in the provincial economy and related matters important to the Legislative Assembly of Ontario.

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