



Financial
Accountability
Office of Ontario

HYDRO ONE

Updated Financial Analysis of the Partial
Sale of Hydro One

Winter 2018

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.

The FAO produces independent analysis on the initiative of the Financial Accountability Officer. Upon request from a member or committee of the Assembly, the Officer may also direct the FAO to undertake research to estimate the financial costs or financial benefits to the Province of any bill or proposal under the jurisdiction of the legislature.

This report was prepared at the direction of the Officer in response to a request from a member of the Assembly. In keeping with the FAO's mandate to provide the Legislative Assembly of Ontario with independent economic and financial analysis, this report makes no policy recommendations.

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Table of Contents

1 Essential Points	1
2 Introduction	7
3 Fiscal Impact of Sale	9
Annual Surplus / (Deficit)	9
Alternative Financing for Infrastructure Projects	13
4 Sale Proceeds & Allocations	15
5 OEFC Debt Reduction	17
6 Trillium Trust	19
7 Effect of Sale on Ratepayers	23
Background	23
Effect of Partial Sale on Ontario Ratepayers	24
8 Hydro One's Purchase of Avista	31
Fiscal Impact Considerations	31
Effect on Ratepayers	32
Dilution of Provincial Ownership of Hydro One	33
9 Appendices	35
Appendix A: Pre-Sale Transactions	35
Appendix B: Development of this Report	37

Table of Abbreviations

Abbreviation	Long Form
Avista	Avista Corporation
BV	Book value
DCF	Discounted cash flow
DPA	Designated purpose account
DRC	Debt retirement charge
Electricity Act	<i>Electricity Act, 1998</i>
FAO	Financial Accountability Office
GBE	Government business enterprise
HON	Hydro One Networks
Hydro One	Hydro One Limited
IPO	Initial public offering
NPV	Net present value
OEB	Ontario Energy Board
OEFC	Ontario Electricity Financial Corporation
OM&A	Operation, maintenance and administration
OPG	Ontario Power Generation
PILs	Payments-in-lieu of taxes



1 | Essential Points

In the 2015 Ontario Budget, the government of Ontario (the Province) announced its intention to sell up to 60 per cent of Hydro One. In December of 2017, the Province completed its final sale of Hydro One shares, generating an estimated \$9.2 billion in proceeds by selling only 53 per cent of Hydro One.¹

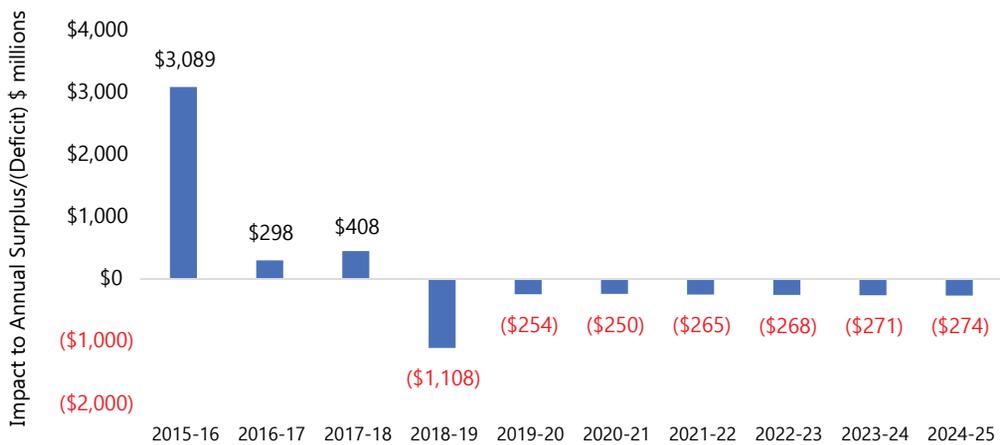
Fiscal Impact of Sale

Annual Surplus / (Deficit)

- The Financial Accountability Office (FAO) estimates that the Province's annual surplus / (deficit) will improve by a total of \$3.8 billion over the fiscal years 2015-16 to 2017-18 as a result of the partial sale of Hydro One (Figure 1-1). For the fiscal year 2018-19, the FAO estimates that the Province's annual surplus / (deficit) will deteriorate by \$1.1 billion. From 2019-20 to 2024-25, the annual surplus / (deficit) is forecast to deteriorate by an average of \$264 million each year.
- The positive fiscal impact from 2015-16 to 2017-18 results from the one-time gain from the sale of Hydro One. The negative ongoing fiscal impact, starting in 2018-19, mainly results from the Province's lost share of 53 per cent of the annual net income from Hydro One and the end of payments by Hydro One to the Province of payments-in-lieu of taxes (PILs). This is only partly offset by the Province's interest expense savings and Hydro One's corporate tax payments to the Province.

¹ The Province also received approximately \$600 million from the sale of Hydro One Brampton in February of 2017. Hydro One Brampton was divested from Hydro One before the initial public offering of Hydro One Limited shares in late 2015. In this report, the FAO excludes the sale of Hydro One Brampton from its analysis.

Figure 1-1: Estimated Impact on the Province’s Surplus / (Deficit) from the Partial Sale of Hydro One, 2015-16 to 2024-25, millions of dollars



Source: FAO.

Alternative Financing for Infrastructure Projects

- The FAO developed an alternative financing scenario in which the Province issues traditional debt to fund an identical amount of infrastructure investment, rather than selling 53 per cent of Hydro One. Starting in 2028-29 and extending over the long-term, the FAO estimates that Provincial net debt will be higher as a result of the partial sale of Hydro One, when compared to the alternative financing scenario.
- In addition, the FAO evaluated the partial sale of Hydro One compared with the alternative financing scenario on a discounted cash flow basis. The FAO estimates that the partial sale of Hydro One will cost the Province \$1.8 billion on a discounted cash flow basis, when compared to the alternative of financing an equivalent amount of infrastructure investment by issuing provincial debt.

Sale Proceeds & Allocations

- The Province generated a total of \$9.2 billion in sale proceeds from the 53 per cent sale of Hydro One, which consists of \$6.8 billion in cash and \$2.4 billion in non-cash proceeds. The \$9.2 billion in sale proceeds will be allocated to the Ontario Electricity Financial Corporation (OEFC) (\$4.6 billion) and the Trillium Trust (\$4.6 billion).
- Of the \$4.6 billion allocated to the Trillium Trust, \$2.2 billion is cash generated from sale proceeds while the remaining \$2.4 billion is a non-cash gain. As a result,

the Province will still be required to borrow \$2.4 billion to finance infrastructure investments connected with the Trillium Trust.

OEFC Debt Reduction

- The OEFC will receive \$4.6 billion of the \$9.2 billion in sale proceeds and also \$3.6 billion from pre-sale transactions for a total cash allocation of \$8.2 billion. In addition, the OEFC will receive \$3.5 billion in non-cash benefits. This results in a total cash and non-cash benefit to the OEFC of \$11.7 billion.
- Although \$11.7 billion in cash and non-cash benefits will impact the OEFC, the OEFC's unfunded liability (or net debt) will only be reduced by \$3.5 billion due to the fact that \$8.2 billion of the benefit will largely reduce liabilities that the Province has with the OEFC, which are reported as assets on the OEFC's financial statements.

Trillium Trust

- The Trillium Trust is a designated purpose account (DPA) which tracks the Province's commitment to fund infrastructure investments from the gains from sale of designated assets, such as Hydro One, as well as other non-cash benefits as determined by the Province. The amounts allocated to the Trillium Trust are spending commitments only and are not supported by set-aside cash or other assets in the financial accounts of the Province.
- Through 2017-18, it is expected that only \$670 million in infrastructure project spending connected with the Trillium Trust commitment will have occurred. The difference in timing between the partial sale of Hydro One and the funding of Trillium Trust committed infrastructure projects implies that the Province will experience a positive fiscal impact from the partial sale of Hydro One through 2017-18 but a growing negative fiscal impact as more infrastructure projects are expensed in connection with the Trillium Trust.
- Although the Province reports on aggregate infrastructure spending in connection with the Trillium Trust spending commitment, the Province does not publicly release a complete list of infrastructure projects.² The FAO recommends that the Province make the complete list of infrastructure projects funded in

² For example, the 2017 Ontario Economic Outlook and Fiscal Review includes a partial list of 2016-17 Trillium Trust related infrastructure projects (p. 82). The Province also provided the FAO with a list of Trillium Trust infrastructure projects. However, the Province has deemed this information to be a Cabinet record and as such the FAO cannot disclose this information as per s. 12(2) of the *Financial Accountability Officer Act, 2013* and Order-in-Council 1412/2016.

connection with the Trillium Trust publicly available so that Members of Provincial Parliament can better understand which projects have and will be funded in connection with the partial sale of Hydro One.

Effect of Sale on Ratepayers

- The FAO has identified three main areas where ratepayers may be affected as a result of the partial sale of Hydro One.
 - **The allocation of the \$2.8 billion deferred tax asset benefit between Hydro One shareholders and ratepayers:** Hydro One has proposed that 100 per cent of the gain should be allocated to shareholders. However, the Ontario Energy Board (OEB) has ruled that 38 per cent of the gain should be allocated to ratepayers, which the FAO estimates will provide ratepayers with approximately \$900 million in savings.³
 - **Hydro One achieving operating efficiencies:** If Hydro One is able to achieve operating efficiencies as a publicly traded company that it was not able to achieve under 100 per cent provincial ownership, then those savings could be passed on to ratepayers.
 - **Changes to Hydro One's long-term financing costs:** The cost of Hydro One's long-term debt financing is passed directly on to ratepayers. Therefore, any increase in Hydro One's cost of long-term debt as a publicly traded company compared to 100 per cent Provincial ownership would be passed on to ratepayers.⁴

Hydro One's Purchase of Avista

- In July of 2017, Hydro One announced that it intends to purchase Avista Corporation (Avista) for \$4.4 billion.⁵ If completed, the purchase of Avista is expected to dilute the Province's ownership of Hydro One from 47 per cent to 42 per cent.
- Overall, the FAO estimates that the Province's annual surplus / (deficit) will deteriorate by about \$5 million in 2019-20 as a result of Hydro One's purchase of Avista. The positive impact from the Province's 42 per cent share of Avista's

³ Hydro One has made a motion to the OEB to review its decision and has also appealed the OEB's decision to the Divisional Court. If Hydro One is successful on either the motion or appeal, the deferred tax asset savings currently allocated to ratepayers could be reduced or eliminated.

⁴ The sale of Hydro One appears to have had only a minor effect on Hydro One Incorporated's perceived creditworthiness with only one rating agency (Moody's) downgrading the company as a result of the sale. Looking ahead, the further reduction of Provincial ownership and increased leverage due to the proposed acquisition of Avista has the potential to further impact Hydro One's credit rating. Both S&P and Moody's have changed their outlook on Hydro One Incorporated from stable to negative due to the proposed Avista acquisition.

⁵ Avista is an energy company involved in the production, transmission and distribution of energy as well as other energy-related businesses. It is based in the United States and its service territory includes Washington, Idaho, Oregon and Alaska. The purchase is subject to closing conditions and expected to be finalized in the second half of 2018.

net income will be offset by its reduced share of Hydro One's Ontario-based net income and Hydro One's new interest costs from debt issued to purchase Avista. Going forward, the impact of the acquisition may improve the Province's annual surplus / (deficit), depending on the future profitability of Avista.

- Hydro One's acquisition of Avista will not have a direct impact on electricity rates in Ontario because Avista's assets are outside of the OEB's regulating jurisdiction. However, if the purchase of Avista were to increase Hydro One's cost of debt, electricity rates in Ontario could increase.⁶ On the other hand, if cost efficiencies are achieved from the expansion of Hydro One's business, the savings could be passed onto Ontario ratepayers which could decrease electricity rates in Ontario.⁷
- If Hydro One were to purchase another North American utility of a similar size to Avista, Provincial ownership of Hydro One would likely drop below 40 per cent. If Provincial ownership of Hydro One falls below 40 per cent, the Province will have the discretion to decide whether or not to return Provincial ownership to the 40 per cent threshold.⁸

6 The OEB considers the cost of Hydro One's debt when determining its revenue requirement. Two credit rating agencies indicated potential negative rating actions on Hydro One Incorporated debt resulting from the potential acquisition of Avista by Hydro One. Moody's Investor Service. "Moody's Affirms Hydro One's Senior Unsecured A3 Ratings; Outlook Changed to Negative." 19 Jul. 2017. S&P Global Ratings. "Hydro One Ltd. And Hydro One Inc. Outlooks Revised to Negative from Stable on Proposed Avista Corp. Acquisition." 19 Jul. 2017.

7 The OEB will consider how costs are allocated between the non-regulated parent company and Hydro One Networks' regulated business.

8 In the event that Provincial ownership of Hydro One falls to less than 40 per cent, then the Electricity Act provides that the Province shall take steps to acquire as many shares in Hydro One as required to return the Province to 40 per cent ownership, but only if the plan to acquire the additional shares is approved by Cabinet (i.e. the Province) and the requisite monies are made available by the Legislature. Electricity Act, s. 48.2(6), (7). There are other conditions as well, such as complying with the *Securities Act*.



2 | Introduction

Hydro One Limited (Hydro One) is primarily an electricity transmission and distribution company.⁹ Hydro One owns and operates 98 per cent of Ontario's transmission capacity and distributes electricity to approximately 25 per cent of Ontario electricity ratepayers, largely those in low density or remote areas of the province.¹⁰ In total, Hydro One recovers about \$3 billion annually from Ontario ratepayers for the transmission and distribution of electricity.¹¹ The Province accounts for its investment in Hydro One as an investment asset in its consolidated financial statements.

In the 2015 Ontario Budget, the Province announced its intention to sell up to 60 per cent of Hydro One. The Province targeted \$9 billion in proceeds from the sale, of which \$4 billion would be invested in infrastructure (through the Trillium Trust) and \$5 billion would be used to reduce debt.¹²

The Province completed its final sale of Hydro One shares in December of 2017 and generated an estimated \$9.2 billion in proceeds.¹³ Overall, the Province was able to achieve more than its targeted proceeds amount by selling only 53 per cent of Hydro One. The FAO estimates that the Province will credit the Trillium Trust with approximately \$4.6 billion and allocate \$4.6 billion to the Ontario Electricity Financial Corporation.

The purpose of this report is to follow up on the FAO's report *An Assessment of the Financial Impact of the Partial Sale of Hydro One*.¹⁴ The report will provide an updated estimate of the fiscal impact of the sale, analyze how much capital the Province raised, and how the sale proceeds are being allocated. The report also analyzes how

9 Transmission refers to the bulk movement of electricity from generating sites to local distribution networks. Distribution refers to the movement of electricity from the local distribution network to the end consumer, i.e. Ontario ratepayers.

10 Hydro One. Investor Overview Third Quarter 2017.

11 Ibid.

12 Ontario Newsroom. "Ontario Raises \$1.83 Billion for Infrastructure Investments." 12 November 2015.

13 The Province also received approximately \$600 million from the sale of Hydro One Brampton in February of 2017. Hydro One Brampton was divested from Hydro One before the initial public offering of Hydro One Limited shares in late 2015. In this report, the FAO excludes the sale of Hydro One Brampton from its analysis.

14 Financial Accountability Office of Ontario. "An Assessment of the Financial Impact of the Partial Sale of Hydro One." October 2015.

changes in Hydro One resulting from the initial public offering could affect electricity ratepayers in Ontario. Lastly, the report reviews key considerations surrounding Hydro One's proposed purchase of Avista Corporation.

Appendix B provides more information on the development of this report.



3 | Fiscal Impact of Sale

Annual Surplus / (Deficit)

The FAO estimates that the Province's annual surplus / (deficit) will improve by a total of \$3.8 billion over fiscal years 2015-16 to 2017-18 as a result of the partial sale of Hydro One. For the fiscal year 2018-19, the FAO estimates that the Province's annual surplus / (deficit) will deteriorate by \$1.1 billion. From 2019-20 to 2024-25, the annual surplus / (deficit) is forecast to deteriorate by an average of \$264 million each year.

Table 3-1 summarizes the FAO's estimate of the impact of the 53 per cent sale of Hydro One to the Province's annual surplus / (deficit) over the period of 2015-16 to 2024-25.

Table 3-1: Estimated Impact on the Province's Surplus / (Deficit) from the Partial Sale of Hydro One

\$ millions	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Gains on Sale	783	541	727	8	8	8	8	8	8	8
Net Income	-48	-201	-346	-383	-417	-436	-465	-487	-509	-534
Deferred Tax Asset	2,392	0	0	-420	0	0	0	0	0	0
Electricity PILs	-42	-126	-117	-122	-136	-143	-152	-159	-166	-174
Corporations Tax	3	28	26	27	30	32	34	35	37	39
DRC Revenue	0	0	0	-465	0	0	0	0	0	0
Interest Savings	0	56	118	247	261	289	311	334	360	387
Impact to Annual Surplus / (Deficit)	3,089	298	408	-1,108	-254	-250	-265	-268	-271	-274

Source: FAO.

Note: Numbers may not add due to rounding. The Gains on Sale are recorded in the Sales and Rentals revenue line and the Deferred Tax Asset impacts are recorded in the Income from Government Business Enterprises revenue line in the Province's consolidated financial statements.

Gains on Sale

The FAO estimates that \$2.1 billion in gains related to the sale of Hydro One will improve the Province's annual surplus / (deficit) from 2015-16 to 2017-18.¹⁵ Table 3-2 summarizes the FAO's estimate of the sale proceeds and gains on sale for the Province's 53 per cent sale of Hydro One shares. Overall, the FAO estimates that the Province received \$6.8 billion in cash proceeds and will report total gains of \$2.2 billion related to the sale of Hydro One shares over time.¹⁶

Table 3-2: Estimated Cash Sale Proceeds and Gains from the 53 per cent sale of Hydro One shares

\$ millions	First Sale	Second Sale	Third Sale	First Nations Sale	Total
Date	Nov-15	Apr-16	May-17	Dec-17	-
Percentage Sold	16%	14%	20%	2%	53%
Cash Sale Proceeds	1,902	1,929	2,733	252	6,817
Less: Book Value Sold	-1,071	-1,321	-2,015	-242	-4,648
Gain on Sale	831	608	719	10	2,168
Deferred Gain	-48	-70	0	-10	-129
Initial Gain on Sale	783	538	719	0	2,040

Source: FAO.

Notes: Numbers may not add due to rounding. The FAO's estimate of cash sale proceeds is net of an estimated \$147 million in transaction costs. The gains on sale as presented in Table 3-1 for 2016-17 and 2017-18 are higher than the initial gain on sale as presented in Table 3-2 for the second and third sales because Table 3-1 includes a portion of realized deferred gains.

Net Income

By selling 53 per cent of Hydro One shares the Province will forgo 53 per cent of Hydro One's future net income, which negatively impacts the Province's annual surplus / (deficit) through lower Income from Government Business Enterprises (GBEs). The FAO estimates that the Province will forgo about \$383 million in net income in 2018-19, which will grow by an average of 5.7 per cent annually from 2018-19 to 2024-25.

15 The Province records gains on sale in its consolidated financial statements on the Sales and Rentals revenue line. The Province calculates the gains as the difference between the cash proceeds received for the sale of shares and the value of those shares that were reported in the Province's consolidated financial statements (i.e. the book value).

16 \$129 million in gains are projected to be deferred and realized in future periods, starting in 2016-17. The \$48 million in deferred gains on the first sale is related to 5.3 million shares sold on loan to the Power Workers' Union and the Society of Energy Professionals. The FAO assumes that these deferred gains will be recognized by the Province over the 15-year term of the loan. The \$70 million in deferred gains on the second sale is related to Ontario Power Generation's (OPG's) purchase of 9 million Hydro One shares, which the FAO amortizes over 15 years because OPG employees are eligible to receive these common shares for up to 15 years. The \$10 million in deferred gains on the First Nations sale is related to the 14 million shares sold on loan to First Nations, which the FAO assumes will be recognized over the 25-year term of the loan.

Deferred Tax Asset

Hydro One reported a \$2.8 billion gain related to a deferred tax asset that was created immediately after the company's initial public offering (IPO). After the IPO, the value of Hydro One's assets increased for tax purposes, which will allow the company to pay reduced corporate tax for a period of time. As a result, the \$2.8 billion of future tax savings were recorded as an asset on Hydro One's financial statements and increased the company's net income. However, the Province owned approximately 84 per cent of Hydro One immediately after the IPO, so it recorded its proportionate ownership of the asset at \$2.4 billion.¹⁷

In 2018-19, the FAO is projecting that the deferred tax asset will be reduced due to a ruling by the Ontario Energy Board (OEB) that allocates a portion of the deferred tax savings to Ontario electricity ratepayers.¹⁸ Hydro One has made a motion to the OEB to review the decision and has also appealed the OEB's decision to the Divisional Court.¹⁹ Should the motion and appeal fail, Hydro One is expected to reduce its deferred tax asset by approximately \$900 million,²⁰ which would reduce its net income. The Province consolidates Hydro One at its proportional ownership of 47 per cent, therefore the FAO has reduced GBE income by \$420 million in fiscal 2018-19.²¹

Electricity PILs

Before the IPO, Hydro One did not pay corporate tax, but rather made payments-in-lieu of taxes (PILs), which approximated the amount of corporate tax (both provincial and federal) that Hydro One would have paid had it not been wholly owned by the Province.²² After the IPO, Hydro One became subject to the corporate tax regime and no longer paid PILs to the Province.²³ As such, the FAO incorporates the loss in Hydro One PILs as a negative fiscal impact, estimated at about \$122 million in 2018-19 and growing at about 6.1 per cent annually to 2024-25.

¹⁷ This proportional benefit was recorded as a positive impact to Hydro One's net income, which increased the Province's Income from GBEs.

¹⁸ Ontario Energy Board Case EB-2016-0160. Chapter 7 reviews this concept in further detail.

¹⁹ Hydro One Q3-17 MD&A.

²⁰ Ibid.

²¹ The FAO estimates, based on Hydro One's guidance from its Q3-17 earnings call, that the company will record the loss in its Q2-18 financial results. As such, the FAO estimates that the Province will consolidate this loss in its financial statements for the fiscal year 2018-19.

²² The effect of the federal *Income Tax Act*, s. 149(1)(d.1) and the provincial *Corporations Tax Act*, s. 57(1)(a) is that Hydro One will be subject to the corporate tax regime should the Province own less than 90 per cent of the company.

²³ In addition, Hydro One was required to make a final PILs payment to the Province immediately before the IPO, known as the departure tax, in the amount of \$2.8 billion, which negatively impacted Hydro One's net income. However, the FAO estimates that this payment had a neutral impact to the Province's annual surplus / (deficit) because the Province recorded \$2.8 billion in one-time revenue from Electricity PILs. Appendix A: Pre-Sale Transactions reviews the fiscal impact of this transaction in further detail.

Corporations Tax

The Province will receive the provincial portion of Hydro One's corporate tax, which has a positive fiscal impact. However, the revaluation of Hydro One's assets for tax purposes will allow the company to pay substantially less corporate tax through 2024-25. In fact, Hydro One will be subject to the corporate minimum tax, estimated by the FAO at about \$27 million in 2018-19, rising to about \$39 million by 2024-25. Beyond 2024-25, the FAO estimates that the loss in PILs revenue for the Province will be greater than the gain in corporate tax revenue. This is primarily due to the fact that Hydro One's payments to the Province under the PILs regime approximated the total amount of corporate tax payable (both provincial and federal). Under the corporate tax regime the Province will only receive provincial corporate tax from Hydro One while the federal government will start to collect Hydro One's federal corporate taxes payable.

DRC Revenue

The debt retirement charge (DRC) is a charge on electricity consumption to help service and repay debt that resulted from the restructuring of Ontario Hydro in 1999. The DRC generated about \$620 million in revenue for the Province in 2016-17.²⁴ Prior to the sale of Hydro One, the Province projected that the DRC would be removed from non-residential bills at the end of calendar 2018,²⁵ however, the Province subsequently announced that the DRC will be removed from non-residential bills on April 1, 2018.²⁶ The FAO assumes that the decision to end the DRC nine months earlier than projected was at least partially due to the sale of Hydro One. As such, the FAO estimates a loss in DRC revenue to the Province of about \$465 million in 2018-19.

Interest Savings

The FAO assumes that Hydro One sale proceeds will reduce Provincial borrowing requirements, which will reduce interest expense. In 2018-19, the FAO estimates that the Province's interest expense will be reduced by about \$247 million, increasing to \$387 million in interest expense savings by 2024-25.²⁷

²⁴ Ontario Electricity Financial Corporation. Annual Report, 2016-17.

²⁵ 2015 Ontario Budget, p. 192. The residential portion of the DRC was eliminated on January 1, 2016.

²⁶ 2015 Ontario Economic Outlook and Fiscal Review, p. 131.

²⁷ This estimate includes the FAO estimate of about \$10 million per year in interest revenue from the loans related to the deferred gains on sale.

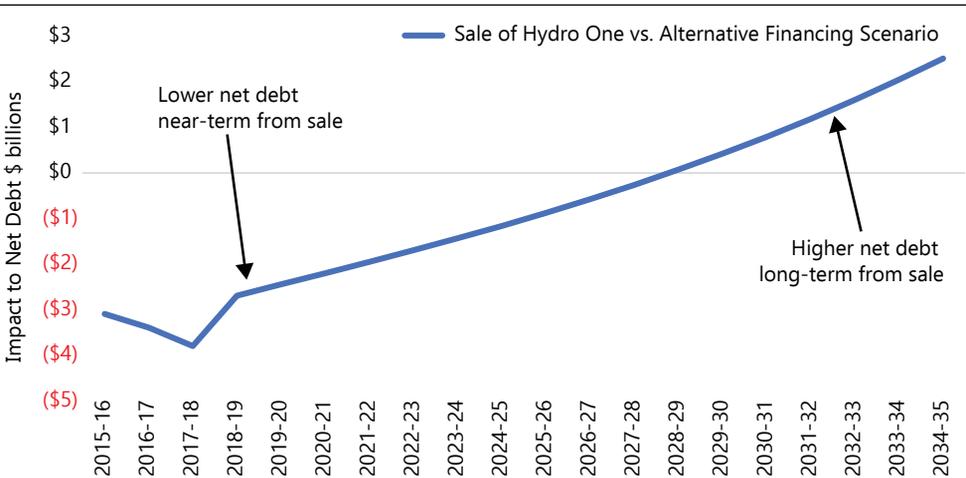
Alternative Financing for Infrastructure Projects

The FAO developed an alternative financing scenario in which the Province issues traditional debt to fund infrastructure projects, rather than selling 53 per cent of Hydro One. Under this alternative financing scenario an equivalent amount of cash is allocated to the Ontario Electricity Financial Corporation (OEFC) and the Trillium Trust through borrowing, rather than through the partial sale of Hydro One. The FAO assumes that in the alternative financing scenario, the Province would be required to issue \$7.8 billion in debt, which is equal to the \$6.8 billion in Hydro One cash sale proceeds, plus \$1.0 billion in cash received from the pre-sale transactions, in order to fund an identical amount of OEFC debt reduction and infrastructure investments.²⁸

Overall, the FAO estimates that under the sale of Hydro One, Provincial net debt will be lower in the near-term, versus the alternative financing scenario, due to the upfront benefits resulting from the gains on sale and the deferred tax asset benefit (Figure 3-1). The Province also benefits from interest expense savings as it is not required to borrow \$7.8 billion.

However, starting in 2028-29 and extending over the long-term, the FAO estimates that Provincial net debt will be higher as a result of the partial sale of Hydro One compared with the alternative financing scenario, in which the Province borrowed \$7.8 billion and did not sell Hydro One, as the interest savings are more than offset by forgone revenue from PILs and net income from Hydro One (Figure 3-1).

Figure 3-1: Estimate of the Net Effect on Provincial Net Debt from the Partial Sale of Hydro One vs. an Alternative Financing Scenario of Issuing \$7.8 billion in Provincial Debt, billions of dollars



Source: FAO.

²⁸ Appendix A: Pre-Sale Transactions reviews the \$1 billion in cash received from the pre-sale transactions.

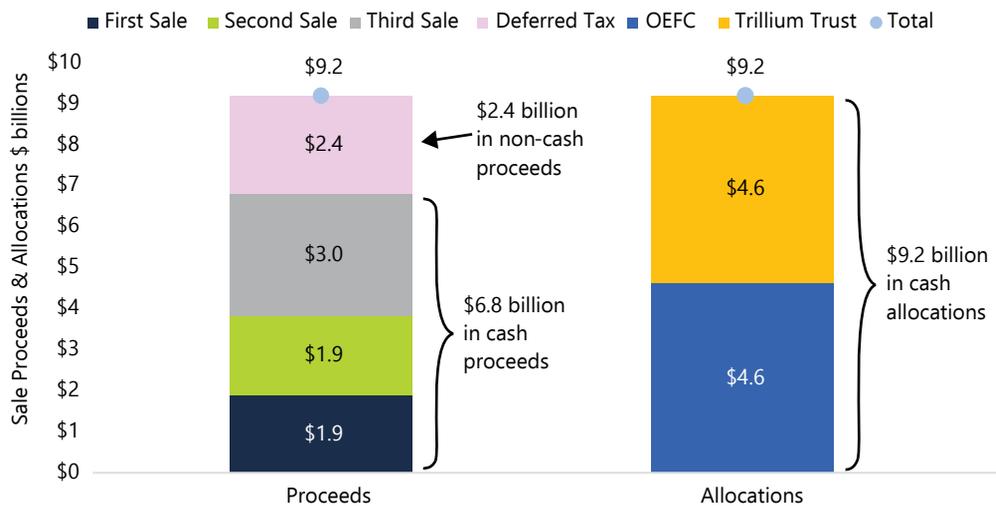
In addition, the FAO evaluated the partial sale of Hydro One compared with the alternative financing scenario on a discounted cash flow (DCF) basis. DCF analysis is a useful way to compare two financing alternatives as the analysis accounts for both the timing and risk of the cash flows under both scenarios. The FAO estimates the net present value (NPV) in 2017 dollars of the partial sale of Hydro One to be \$1.8 billion less than the NPV of generating an equivalent amount of cash by issuing provincial debt.²⁹ In other words, the FAO estimates that the partial sale of Hydro One will cost the Province \$1.8 billion on a discounted cash flow basis, when compared to the alternative of financing an equivalent amount of infrastructure investment by issuing provincial debt.

²⁹ The net present value (NPV) of the Hydro One sale scenario is calculated as the discounted value of the cash generated as a result of the sale and return on debt reduction and infrastructure investment less the Province's foregone Hydro One free cash flows and lost tax revenue. The NPV of the alternative financing scenario is calculated as the discounted value of issuing debt to generate an equivalent amount of cash as the sale of Hydro One and allocating that cash in the same manner as the Hydro One sale scenario. The difference in NPV of the Hydro One sale and alternative financing scenario results in a negative NPV of \$1.8 billion for the partial sale of Hydro One.

4 | Sale Proceeds & Allocations

The FAO estimates that the Province generated a total of \$9.2 billion in sale proceeds from the 53 per cent sale of Hydro One, which consists of \$6.8 billion in cash and \$2.4 billion in non-cash proceeds (Figure 4-1).³⁰ The \$9.2 billion in sale proceeds will be allocated to the Ontario Electricity Financial Corporation (OEFC) and the Trillium Trust.

Figure 4-1: Estimate of Sale Proceeds and Cash Allocations, billions of dollars



Source: FAO.

Notes: Numbers may not add due to rounding. The FAO's estimate of proceeds from the First Nations sale is included in the estimate of sale proceeds related to the third sale.

The FAO estimates that the Province will allocate \$4.6 billion to the OEFC which is equal to the book value of Hydro One shares sold. In addition, the Province will allocate \$4.6 billion to the Trillium Trust for infrastructure investments. This consists of \$2.2 billion related to the gain on sale of Hydro One shares and \$2.4 billion related to the deferred tax asset benefit.³¹

Note that of the \$4.6 billion allocated to the Trillium Trust, the \$2.2 billion related

³⁰ The FAO includes the non-cash proceeds, which is a result of Hydro One's deferred tax asset benefit, to be consistent with the definition that is used by the Province.

³¹ *Trillium Trust Act, 2014*, ss. 4 and 6, and Ontario Regulation 295/16.

to the gain on sale is cash generated from sale proceeds (see Table 3-2), while the \$2.4 billion related to the deferred tax asset benefit is a non-cash gain. As a result, the Province will still be required to borrow \$2.4 billion to finance infrastructure investments connected with the Trillium Trust.³²

The following two chapters discuss the allocations to the OEFC and the Trillium Trust in more detail.

³² However, the FAO estimates that Hydro One will receive \$1 billion in cash savings in connection with the deferred tax asset benefit through 15 years, which could be allocated to shareholders, including the Province.

5 | OEFC Debt Reduction

As noted in chapter 4, \$4.6 billion of the \$9.2 billion in sale proceeds will be allocated to the OEFC.³³ Additionally, as a result of pre-sale transactions, the OEFC received \$2.8 billion for the departure tax payment and \$800 million from the special dividend payment made by Hydro One to the Province immediately before the sale.³⁴ Overall, the FAO estimates that the OEFC will receive \$8.2 billion in cash related to the 53 per cent sale of Hydro One (Figure 5-1).

In addition, the FAO estimates that the OEFC will receive \$3.5 billion in non-cash benefits, which are related to the deferred tax asset benefit (\$2.4 billion)³⁵ and \$1.1 billion as required under the *Electricity Act, 1998* (the Electricity Act).³⁶ This results in a total cash and non-cash benefit to the OEFC of \$11.7 billion (Figure 5-1).

Although \$11.7 billion in cash and non-cash benefits will impact the OEFC, the OEFC's unfunded liability (or net debt) will only be reduced by \$3.5 billion as a result of the partial sale of Hydro One (Figure 5-1). This is due to the fact that \$8.2 billion of the benefit will largely reduce liabilities that the Province has with the OEFC, which are reported as assets on the OEFC's financial statements.³⁷ Only the deferred tax asset benefit (\$2.4 billion) and Electricity Act benefit (\$1.1 billion) represent an actual gain to the OEFC (i.e. unfunded liability reduction) from the partial sale of Hydro One.

33 The OEFC is one of five entities established by the Electricity Act as part of the restructuring of the former Ontario Hydro. The OEFC manages the debt, financial risks, and liabilities of the former Ontario Hydro.

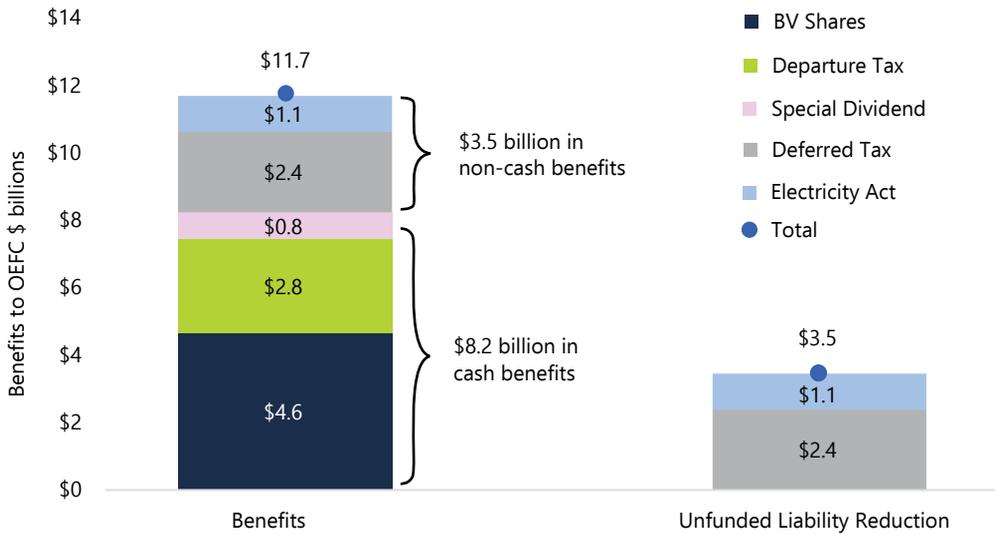
34 Appendix A: Pre-Sale Transactions reviews the departure tax and special dividend payment in further detail.

35 The Province has committed to allocate to the OEFC its proportional ownership of Hydro One's net income, less the Province's original cost of its investment in Hydro One (OEFC Annual Report, 2016-17, p. 19). The deferred tax asset benefit increased Hydro One's net income by \$2.8 billion, of which the Province's share was \$2.4 billion. As such, the Province will allocate \$2.4 billion to the OEFC in the amount of the deferred tax asset benefit.

36 Section 50.3 of the Electricity Act requires the Province to provide the OEFC with a financial benefit upon the sale of Hydro One shares. This benefit is calculated as the gross sale proceeds less certain amounts as determined by the Minister of Finance. The FAO estimates that the Province will allocate a total financial benefit of \$1.1 billion to the OEFC in connection with the 53 per cent sale of Hydro One as required by the Electricity Act. However, the Province will not provide the OEFC with \$1.1 billion in cash, but rather forgive \$1.1 billion in liabilities that the OEFC has with the Province.

37 The allocations for the book value of Hydro One shares (\$4.6 billion) and the special dividend (\$0.8 billion) are related to existing OEFC assets. The departure tax payment was not directed to reduce OEFC assets, but Hydro One's net income was reduced by an equivalent amount, which reduced the Province's commitment to allocate this net income to the OEFC, resulting in a neutral impact to the OEFC's unfunded liability overall.

Figure 5-1: Estimate of Total Benefits to the OEFC and Impact to the OEFC’s Unfunded Liability (Net Debt) from the Partial Sale of Hydro One, billions of dollars



Source: FAO.

Note: Numbers may not add due to rounding.

Interestingly, as noted in chapter 4, the Province allocated \$4.6 billion to the Trillium Trust consisting of \$2.4 billion related to the deferred tax asset benefit and \$2.2 billion related to the gain on sale of Hydro One. However, as discussed above, the \$2.4 billion deferred tax asset benefit also impacted the OEFC.³⁸ This is possible because the fiscal impact to the OEFC from the sale of Hydro One is reported in the consolidated financial statements of the Province in the Public Accounts of Ontario. The Trillium Trust is an account which tracks future Provincial spending commitments. The amounts allocated to the Trillium Trust are spending commitments only and are not supported by set-aside cash or other assets in the financial accounts of the Province. See chapter 6 for more details.

³⁸ As well, the \$1.1 billion benefit to the OEFC under the Electricity Act is also part of the \$2.2 billion allocated to the Trillium Trust.

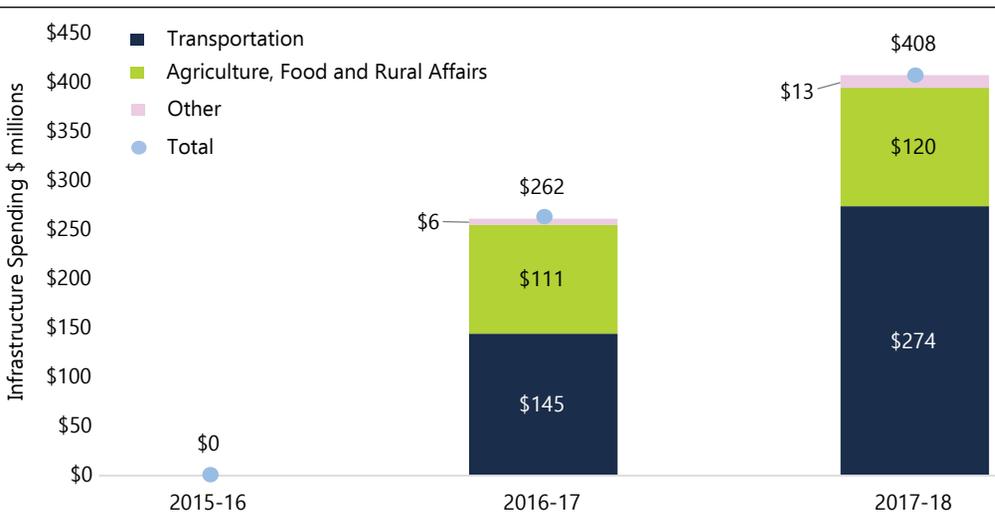
6 | Trillium Trust

The Trillium Trust is a designated purpose account (DPA) which tracks the Province’s commitment to fund infrastructure investments from the gains from sale of designated assets, such as Hydro One, as well as other non-cash benefits as determined by the Province. As noted in chapter 4, the FAO estimates that a total of \$4.6 billion will be allocated to the Trillium Trust, representing \$2.2 billion from the gain on sale of Hydro One and \$2.4 billion from the allocation of the deferred tax asset benefit.

The Trillium Trust is an account which tracks infrastructure spending commitments. The amounts allocated to the Trillium Trust are spending commitments only and are not supported by set-aside cash or other assets in the financial accounts of the Province.

Through 2017-18 it is expected that a total of \$4.4 billion will have been allocated to the Trillium Trust from the sale of Hydro One. However, by the end of 2017-18 it is expected that only \$670 million in infrastructure project spending connected with the Trillium Trust commitment will have occurred, largely through the Ministries of Transportation and Agriculture, Food and Rural Affairs (Figure 6-1).

Figure 6-1: Infrastructure Spending Connected to the Trillium Trust, millions of dollars



Source: FAO analysis of 2015-16 and 2016-17 Public Accounts of Ontario and 2017-18 Expenditure Estimates.

Although it is possible to determine through the Public Accounts of Ontario and the Expenditure Estimates which ministries have funded infrastructure projects through the Trillium Trust spending commitment, the Province does not publicly release the complete list of infrastructure projects.³⁹ The FAO recommends that the Province make the complete list of infrastructure projects funded in connection with the Trillium Trust publicly available so that Members of Provincial Parliament can better understand which infrastructure projects have and will be funded in connection with the partial sale of Hydro One.

The difference in timing between the partial sale of Hydro One and the funding of Trillium Trust committed infrastructure projects means that the Province will experience a positive fiscal impact from the partial sale of Hydro One through 2017-18 but a growing negative fiscal impact as more infrastructure projects are funded in connection with the Trillium Trust. Figure 6-2 shows \$4.4 billion of the \$4.6 billion total allocation⁴⁰ estimated to be credited to the Trillium Trust from 2015-16 to 2017-18 as a result of the partial sale of Hydro One, which is then compared to the \$0.5 billion in total estimated capital expense⁴¹ connected to the Trillium Trust spending commitment over the same time period.

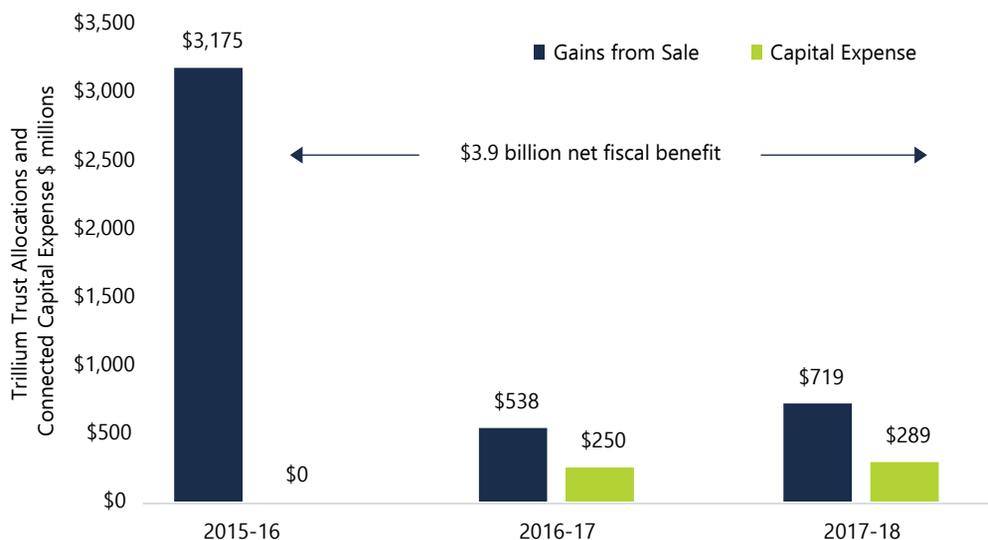
Overall, the Province will realize a net fiscal benefit of approximately \$3.9 billion over this period, as capital infrastructure expense will be less than the gains from the sale of Hydro One. However, this net fiscal benefit will deteriorate towards a net fiscal loss in future years, as only \$0.1 billion in gains remain to be credited to the Trillium Trust while \$4.0 billion in infrastructure spending remains to be expensed to the Province's surplus / (deficit).

39 For example, the 2017 Ontario Economic Outlook and Fiscal Review includes a partial list of 2016-17 Trillium Trust related infrastructure projects (p. 82). The Province also provided the FAO with a list of Trillium Trust infrastructure projects. However, the Province has deemed this information to be a Cabinet record and as such the FAO cannot disclose this information as per s. 12(2) of the *Financial Accountability Officer Act, 2013* and Order-in-Council 1412/2016.

40 The Province has deferred about \$129 million of the allocation to be credited to the Trillium Trust until after 2017-18.

41 Capital expense typically has an immediate negative impact on the Province's annual surplus / (deficit), whereas spending on capital assets does not have an immediate impact on the annual surplus / (deficit). However, capital assets will negatively impact the annual surplus / (deficit) in the future as the assets are amortized.

Figure 6-2: Trillium Trust, Allocations and Connected Capital Expense, 2015-16 to 2017-18, millions of dollars



Source: FAO.

Note: Figure only shows capital expense. Capital expense typically has an immediate negative impact on the Province’s annual surplus / (deficit), whereas spending on capital assets does not have an immediate impact on the annual surplus / (deficit). However, capital assets will negatively impact the annual surplus / (deficit) in the future as the assets are amortized.

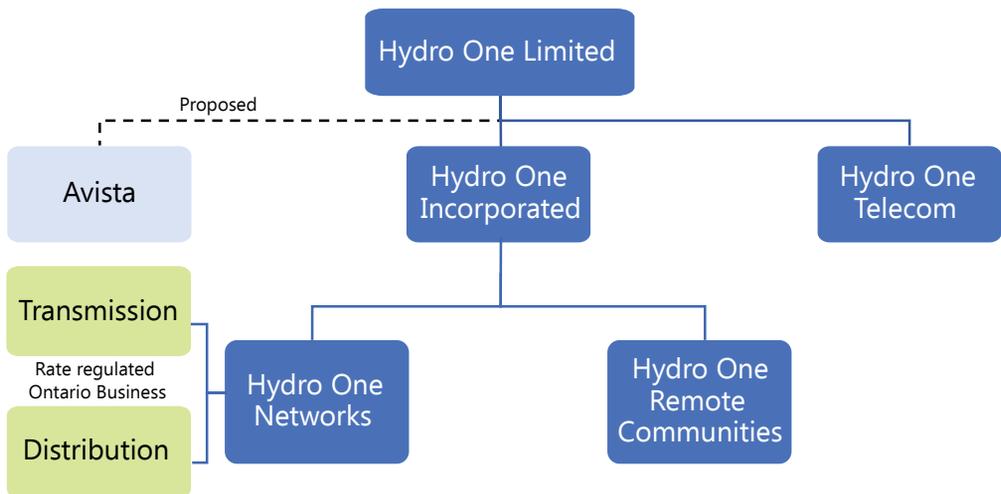


7 | Effect of Sale on Ratepayers

Background

Hydro One Limited (Hydro One) is a holding company with four subsidiaries, the largest of which is Hydro One Networks. Hydro One Networks (HON) is the subsidiary of Hydro One that transmits and distributes electricity to Ontario ratepayers and currently generates 99 per cent of Hydro One’s revenue.⁴² Hydro One Networks continues to be regulated by the Ontario Energy Board (OEB) post-sale. HON must submit applications to the OEB which outline the utility’s revenue requirement, which is the amount HON projects to recover from ratepayers in each year. The OEB approves HON’s rates for its transmission and distribution businesses after a public regulatory process. The approved revenue requirement reflects the OEB’s determination of the amount of revenue required by Hydro One to cover the reasonably incurred costs of owning, operating and maintaining the transmission and distribution systems at a level of service that meets the needs of its customers.⁴³ In 2016, Hydro One recovered approximately \$3 billion from Ontario ratepayers for the transmission and distribution of electricity.

Figure 7-1: Hydro One Corporate Structure



Source: FAO.

⁴² Hydro One. “Investor Overview Post Third Quarter 2017.” 10 Nov. 2017. Web. 2 Jan. 2017.

⁴³ Ontario Energy Board Case EB-2016-0160.

Effect of Partial Sale on Ontario Ratepayers

2017 OEB Decision on HON Transmission Rates

On November 23 and December 20, 2017, the OEB issued decisions which approved HON's transmission revenue requirement for 2017 and 2018. The decisions established precedent for how some of the changes to Hydro One as a result of becoming a publicly traded company will affect electricity rates in Ontario.⁴⁴ HON applied for a transmission revenue requirement of \$1,589 million in 2017 and \$1,660 million in 2018. The OEB reduced Hydro One's revenue requirement by a total of \$86 million to \$1,540 million in 2017 and \$1,624 million in 2018 to reflect the following changes:

- reduction of regulatory income tax expense by a total of \$66 million to reflect the allocation of a portion of Hydro One's deferred tax asset benefit to ratepayers;
- reduction of proposed operating expenses by a total of \$30 million to remove what the OEB deemed was excessive executive compensation; and
- an increase of \$10 million resulting from an increase in HON's 2018 approved return on capital which is partially offset by reductions in HON's cost of capital and depreciation expenses to reflect the removal of \$248 million from Hydro One's capital spending envelope.⁴⁵

The net result is a 2.9 per cent decrease in HON's transmission revenue requirement from 2016 to 2017, followed by a 5.1 per cent increase from 2017 to 2018 (Table 7-1).⁴⁶ Overall, the increase in the revenue requirement from 2017 to 2018 is driven by increased capital spending which is reflected in higher depreciation and cost of capital expenses.

⁴⁴ Hydro One also has a distribution rate application currently pending for the years 2018 to 2022.

⁴⁵ Capital costs are not recovered from ratepayers in the year they are incurred. They are added to HON's rate base and expensed throughout their useful lives (depreciation).

⁴⁶ Transmission charges comprise approximately 6.8 per cent of the average residential ratepayer's electricity bill in Ontario. Therefore, the approved revenue requirement would lead to a 0.07 per cent increase in the average Ontario ratepayer's electricity bill from 2016 to 2018. Ontario Energy Board Case EB-2017-0160.

Table 7-1: Summary of OEB approved Hydro One Transmission Revenue Requirement (\$ millions)

Transmission	2012	2013	2014	2015	2016	2017	2018
OM&A	427	440	450	431	437	398	394
Depreciation	333	345	372	387	397	434	469
Regulatory Income Tax	52	43	53	67	72	51	57
Cost of Capital	607	609	660	641	662	657	704
HON Revenue Requirement	1,418	1,438	1,535	1,527	1,568	1,540	1,624
Adjustments	-31	-47	-89	-50	-87	-102	-113
Rates Revenue Requirement	1,387	1,391	1,446	1,477	1,481	1,438	1,511

Source: FAO analysis of OEB information.

Hydro One has also filed a distribution rate application for the years 2018 to 2022. At the time this report was finalized, the distribution application had not been approved by the OEB. However, the application requests 3.5 per cent average annual distribution rate increases from 2018 to 2022 which are also driven primarily by increased capital investment.⁴⁷

Effect of Partial Sale of Hydro One on Ratepayers: General Considerations

The FAO has analyzed the OEB's decision on HON's transmission revenue requirement and HON's rate setting methodology and has identified three areas where ratepayers will / could be affected as a result of the partial sale of Hydro One.

- Allocation of the deferred tax asset benefit
- Operating expenses / efficiencies
- Cost of capital

In addition, the FAO offers some considerations on how the partial sale of Hydro One impacted ratepayers through the debt retirement charge. The following sections provide analysis of each area.

Allocation of the Deferred Tax Asset Benefit

In its transmission and distribution applications to the OEB, Hydro One proposed that 100 per cent of the benefit from the deferred tax asset should be allocated to shareholders (including the Province). This approach was rejected by the OEB as it would have resulted in a large discrepancy between the "regulated" tax expense

⁴⁷ Ontario Energy Board Case EB-2017-0049 Exhibit A Tab 3 Schedule 1 p. 15. Hydro One's distribution application would only affect the 25 per cent of ratepayers served by Hydro One. For reference, if the application is approved, typical urban, R1 and R2 Hydro One customer bills would increase by an annual average of 1.0 per cent, 1.6 per cent and 3.5 per cent, respectively, from 2018 to 2022.

recovered from ratepayers and HON's actual taxes payable. HON had requested to recover \$81.9 million and \$89.6 million of transmission tax expenses from ratepayers in 2017 and 2018 while actual taxes payable by Hydro One for its transmission business are expected to be \$12.2 and \$13.1 million in 2017 and 2018.⁴⁸

Ultimately, the OEB decided to allocate a portion of the deferred tax asset benefit to ratepayers⁴⁹ using the "benefits follow costs principle."⁵⁰ The OEB determined that 38 per cent of the benefit is attributable to the costless deemed sale of shares and that proportion of the benefit should be allocated to ratepayers.⁵¹ The FAO estimates that the result of this decision will provide ratepayers with savings of approximately \$900 million, of which 57 per cent will be allocated to transmission customers and 43 per cent to distribution customers. As a result, the 2017 and 2018 transmission revenue requirement has been reduced by a total of \$66 million. The remaining savings will be allocated to ratepayers over a number of years as Hydro One's annual regulatory income tax revenue requirement is reduced by the amount of tax savings allocated to ratepayers.

Operating Expenses / Efficiencies

One of the key premises the Province outlined in its rationale for the sale of Hydro One was the potential for private sector discipline to create operating efficiencies that could be passed on to ratepayers.⁵² Any operating efficiencies realized by Hydro One would be reflected in lower Operation, Maintenance and Administration (OM&A) expenses.⁵³

Table 7-2: Hydro One OEB Approved and Actual OM&A expenses (\$2017 millions)

Transmission	2012	2013	2014	2015	2016	2017	2018
OEB Approved OM&A	460	470	470	446	445	398	387
Actual OM&A	447	414	418	457	441		

Source: FAO analysis of Ontario Energy Board Case EB-2016-0160.

48 The 2018 amount was subsequently adjusted by a small amount due to a subsequent decision to increase Hydro One's cost of capital in 2018.

49 Hydro One has made a motion to the OEB to review its decision and has also appealed the OEB's decision to the Divisional Court. If Hydro One is successful on either the motion or appeal, the deferred tax asset savings currently allocated to ratepayers could be reduced or eliminated.

50 The precedent for the benefits follow costs principle can be found in the OEB's RP-2004-0188 Report.

51 The calculation behind the 38% allocation to ratepayers is as follows: 51% of the shares of Hydro One have actually been sold to shareholders at the fair market value of the company, therefore, 51% of the deferred tax asset benefit was allocated to shareholders. In addition, Hydro One incurred a departure tax cost that preceded the deferred tax asset benefit on the 49% of shares that were not sold and 11% of the deferred tax asset benefit was determined to have followed that cost. As a result, 62% of the deferred tax asset benefit was allocated to shareholders and the remaining 38% to ratepayers. See Ontario Energy Board Case EB-2016-0160 for additional detail.

52 Government of Ontario. "Striking the Right Balance: Improving Performance and Unlocking Value in the Electricity Sector in Ontario." 16 Apr. 2015, p. 13.

53 Efficiencies could also be reflected in more efficient capital spending.

On an inflation adjusted basis, the OEB approved transmission OM&A amounts of \$398 million and \$387 million in 2017 and 2018 are lower than any approved amounts from 2012 to 2016 (Table 7-2). However, since 2012, Hydro One's actual transmission OM&A expenses have been less than the OEB approved amounts in each year except for 2015.⁵⁴

One of the areas that directly affected Hydro One's OM&A expenses as a result of the sale was executive compensation. Hydro One requested a 6.5 per cent increase in management and executive pay in 2017 which reflected the hiring of 12 new members of the board of directors and a new Chief Executive Officer (CEO) and Chief Financial Officer (CFO) by Hydro One Limited.⁵⁵ HON has argued that such compensation would provide customers value and should be reflected in transmission rates.

In its decision, the OEB outlined that Hydro One did not adequately demonstrate that the increased executive compensation costs will provide improvements in efficiency and productivity. As a result, the OEB reduced HON's transmission compensation revenue requirement (under OM&A) by a total of \$30 million in 2017 and 2018. Should HON adequately demonstrate that the increased executive compensation is providing ratepayers value in the future, the FAO assumes such costs would be factored into HON's revenue requirement.

Cost of Capital

Hydro One's transmission and distribution rates are set by the OEB to include a cost of capital as part of HON's revenue requirement. When Hydro One makes investments in capital assets such as transmission infrastructure, the value of the assets is added to Hydro One's rate base. Hydro One earns profit by earning a return on its rate base which consists of the carrying cost of HON's long-lived assets.

Alignment of the interests of shareholders and ratepayers

As a publicly traded company, Hydro One will have investor pressure to generate returns in excess of OEB approved levels. The return paid by ratepayers to Hydro One shareholders is reflected in the return on equity portion of HON's cost of capital revenue requirement. The methodology to determine Hydro One's cost of capital has not changed as a result of the partial sale.

⁵⁴ Hydro One's OM&A revenue requirement is not adjusted based on actual expenses.

⁵⁵ Ontario Energy Board Case EB-2016-0160. Undertaking J.10. The introduction of Long-Term Incentive and Employee Share Ownership Programs is also reflected.

Table 7-3 outlines the calculation of Hydro One’s 2017 transmission cost of capital. Hydro One’s regulated capital structure is 40 per cent equity and 60 per cent debt (56 per cent long-term debt and 4 per cent short-term debt).

Table 7-3: Calculation of Hydro One Transmission Cost of Capital, 2017
(\$ millions)

	Rate Base	% of Deemed Capital Structure	Rate of Return	Cost of Capital to be Recovered from Ratepayers
Long-Term Debt	5,893	56%	4.67%	280
Short-Term Debt	421	4%	1.76%	7
Common Equity	4,209	40%	8.78%	370
Total	10,523		6.20%	657

Source: Ontario Energy Board Case EB-2016-0160.

Note: the cost of long-term debt includes a \$4.6 million return on funds used during construction which are not part of Hydro One’s rate base.

Hydro One’s 2017 transmission revenue requirement is set to provide shareholders with an 8.78 per cent return on their equity investment in HON.⁵⁶ Hydro One’s return on equity is not guaranteed and the actual return shareholders earn depends on:

1. Hydro One’s actual revenue and expenses;
2. the extent to which Hydro One’s actual capital structure aligns with its regulated capital structure; and
3. Hydro One’s ability to grow its rate base through increased capital investment (and acquisitions).

The rate regulated structure provides an incentive for Hydro One to overstate its revenue requirement, as one way HON can provide returns to shareholders in excess of the regulated return is to collect more from ratepayers than the actual cost of providing transmission and distribution services. In addition, the structure provides an incentive for Hydro One to make excess capital investment to grow the rate base on which shareholders earn a return.

One way the OEB attempts to align the interests of ratepayers and shareholders is through what is known as incentive-based rate making.⁵⁷ Hydro One’s distribution rates include an earnings-sharing mechanism whereby ratepayers share 50 per cent

⁵⁶ The regulated return on equity was unaffected by the partial sale of Hydro One and is set annually by the Ontario Energy Board based on a formulaic approach unrelated to Hydro One’s actual capital structure. The approved return on equity for 2018 is 9 per cent.

⁵⁷ The OEB can also adjust approved revenue requirement levels if HON persistently spends less than revenue targets. The OEB also ensures the prudence of HON’s capital spending.

of any earnings that exceed the regulated return on equity by more than 100 basis points (1 per cent).⁵⁸

Overall, the OEB’s regulatory oversight and incentive rate setting process could help to ensure that shareholders do not earn excess returns at the expense of ratepayers and that ratepayers benefit from efficiencies realized by Hydro One.

Cost of debt financing

Hydro One’s cost of long-term debt financing, which represents 56 per cent of HON’s regulated capital structure, is calculated based on Hydro One’s weighted average rate on embedded debt, new debt and forecast debt. Therefore, unlike HON’s cost of equity, the cost of long-term debt passed on to ratepayers is directly related to the company’s actual financing costs.⁵⁹

The debt to finance HON’s capital investments is issued by its parent company Hydro One Incorporated. Hydro One Incorporated has traditionally benefitted from credit ratings one or two notches (depending on the rating agency) below the rating of the Province of Ontario. The sale of Hydro One appears to have had only a minor effect on Hydro One Incorporated’s perceived creditworthiness with only one rating agency (Moody’s) downgrading the company as a result of the sale.⁶⁰ The primary reason for the downgrade from Moody’s is the lack of perceived backing from the Province of Ontario due to the Province’s reduced ownership of the company.⁶¹

Table 7-4: Hydro One Incorporated Long-Term Debt Rating

	2013	2014	2015	2016	2017
Hydro One Incorporated Long-Term Debt Rating					
S&P	A+	A+	A	A	A
DBRS	A (high)				
Moody’s	A1	A1	A3	A3	A3
Ontario Long-Term Debt Rating					
S&P	AA-	AA-	A+	A+	A+
DBRS	AA(low)	AA(low)	AA(low)	AA(low)	AA(low)
Moody’s	Aa2	Aa2	Aa2	Aa2	Aa2

Source: Hydro One Annual Reports 2012 through 2016.

⁵⁸ Hydro One’s transmission business does not currently incorporate an earnings-sharing mechanism. However, the transmission business will be adopting an incentive-based rate setting model in 2019. Hydro One Investor Overview Second Quarter 2017.

⁵⁹ Hydro One’s short-term debt rate is calculated based on a formulaic approach based on Bank of Canada rates.

⁶⁰ The downgrade by S&P in 2015 was a result of S&P’s decision to downgrade the Province of Ontario.

⁶¹ Moody’s Investors Service. “Moody’s Downgrades Hydro One to A3; Outlook Changed to Stable.” 05 Nov. 2015.

Looking ahead, the further reduction of Provincial ownership and increased leverage due to the proposed acquisition of Avista has the potential to impact Hydro One's credit rating.⁶² Both S&P and Moody's have changed their outlook on Hydro One Incorporated from stable to negative due to the proposed Avista acquisition.⁶³ Any deterioration of Hydro One Incorporated's creditworthiness would increase the yield on its new debt. As a result, the long-term debt costs passed on to ratepayers would likely increase (relative to 100 per cent Provincial ownership) over time as debt issued while Hydro One was under 100 per cent control of the Province is retired and new debt is issued.

Debt Retirement Charge

The debt retirement charge (DRC) is a charge on electricity consumption paid by non-residential electricity ratepayers. The FAO assumes that the decision to end the DRC on April 1, 2018, rather than December 31, 2018, was at least partially a result of the sale of Hydro One. Therefore, the FAO estimates that the partial sale of Hydro One will save non-residential electricity ratepayers approximately \$465 million in 2018.⁶⁴

⁶² The debt issued to finance the acquisition of Avista will be issued by Hydro One Limited, not Hydro One Incorporated.
⁶³ Moody's Investor Service. "Moody's Affirms Hydro One's Senior Unsecured A3 Ratings; Outlook Changed to Negative." 19 Jul. 2017. S&P Global Ratings. "Hydro One Ltd. And Hydro One Inc. Outlooks Revised to Negative from Stable on Proposed Avista Corp. Acquisition." 19 Jul. 2017.
⁶⁴ See chapter 3 for more details.

8 | Hydro One's Purchase of Avista

In July of 2017, Hydro One announced that it intends to purchase Avista Corporation (Avista) for \$4.4 billion.⁶⁵ Avista is an energy company involved in the production, transmission and distribution of energy as well as other energy-related businesses. It is based in the United States and its service territory includes Washington, Idaho, Oregon and Alaska.⁶⁶

Fiscal Impact Considerations

The FAO did not forecast the ongoing fiscal impact to the Province of Hydro One's pending purchase of Avista, but it offers the following considerations:

1. The FAO estimates that the Province's ownership share in Hydro One will decline by 5 percentage points following the acquisition of Avista, from 47 per cent to 42 per cent.⁶⁷
 - The FAO estimates that the Province will forgo about \$40 million in Hydro One's Ontario-based net income for the fiscal year 2019-20 as a result of its diluted ownership in the company.
2. The FAO estimates that Avista generates about \$180 million per year in net income.⁶⁸
 - Avista is also a regulated utility with a rate base of \$3.88 billion (22 per cent of the size of Hydro One) and an average regulated return on equity of 9.6 per cent.
 - The FAO estimates that the Province will realize 42 per cent of the net income from Avista, at about \$75 million for the fiscal year 2019-20.

⁶⁵ The purchase is subject to closing conditions and expected to be finalized in the second half of 2018. The \$4.4 billion purchase price is in Canadian dollars (CAD). Hydro One will also assume Avista's debt for a total purchase price of \$6.7 billion CAD.

⁶⁶ Hydro One press release. "Hydro One to Acquire Avista to Create Growing North American Utility Leader with C\$31.2 Billion in Enterprise Value." 19 July 2017.

⁶⁷ This is estimated to occur in calendar third quarter of 2018 when convertible debt issued to acquire Avista is converted to an estimated additional 72 million Hydro One shares. The FAO assumes that the Province will not purchase any of these securities.

⁶⁸ In Canadian dollars.

3. Hydro One will take on more debt as a result of its purchase of Avista, including issuing \$3.4 billion in new debt in connection with the acquisition.
 - The FAO estimates that the Province will realize 42 per cent of the additional interest costs associated with this new debt, at about \$40 million for the fiscal year 2019-20.⁶⁹

Overall, the FAO estimates that the Province's annual surplus / (deficit) will deteriorate by about \$5 million in 2019-20 as a result of Hydro One's purchase of Avista.

Going forward, the impact to the Province's annual surplus / (deficit) may improve, depending on the future profitability of Avista.

Effect on Ratepayers

The FAO did not estimate the potential impact on electricity rates as a result of Hydro One's pending acquisition of Avista. However, the FAO provides the following three considerations:

1. The OEB sets electricity rates in Ontario based on regulated assets in Ontario. As such, Avista's assets should not have an impact on electricity rates in Ontario, because they are located outside of the OEB's regulating jurisdiction.
2. The OEB considers the cost of Hydro One's debt when determining its revenue requirement. Two credit rating agencies indicated potential negative rating actions on Hydro One Incorporated debt resulting from the potential acquisition of Avista by Hydro One.⁷⁰ Therefore, there is potential for the acquisition of Avista to increase Hydro One Incorporated's cost of debt, which would increase Hydro One Networks' revenue requirement, which could increase electricity rates in Ontario.
3. The OEB will consider how costs are allocated between the non-regulated parent company and Hydro One Networks' regulated business. Therefore, there is potential for cost efficiencies that are realized due to the expansion of Hydro One's business which could potentially decrease Hydro One Networks' revenue requirement, which could decrease electricity rates in Ontario.

⁶⁹ The \$40 million interest cost estimate also accounts for tax savings due to higher interest expenses.

⁷⁰ Moody's Investor Service. "Moody's Affirms Hydro One's Senior Unsecured A3 Ratings; Outlook Changed to Negative." 19 Jul. 2017. S&P Global Ratings. "Hydro One Ltd. And Hydro One Inc. Outlooks Revised to Negative from Stable on Proposed Avista Corp. Acquisition." 19 Jul. 2017.

Dilution of Provincial Ownership of Hydro One

As noted above, Hydro One's proposed purchase of Avista is expected to dilute the Province's ownership of Hydro One from 47 per cent to 42 percent. If Hydro One were to purchase another North American utility of a similar size to Avista it would likely drop Provincial ownership of Hydro One to below 40 per cent.⁷¹

Under the Electricity Act, the Province cannot sell shares of Hydro One if it would take Provincial ownership below 40 per cent.⁷² However, the Electricity Act does not prevent Hydro One from issuing additional shares to make another acquisition and thereby dilute Provincial ownership of Hydro One to less than 40 per cent.

If a new acquisition by Hydro One were to reduce Provincial ownership to less than 40 per cent, then the Electricity Act provides that the Province shall take steps to acquire as many shares in Hydro One as required to return the Province to 40 per cent ownership, but only if the plan to acquire the additional shares is approved by Cabinet (i.e. the Province) and the requisite monies are made available by the Legislature.⁷³ Consequently, if Provincial ownership of Hydro One falls below 40 per cent, the Province will have the discretion to decide whether or not to return Provincial ownership to the 40 per cent threshold.

71 Hydro One's management has expressed an interest in pursuing further acquisitions of North American utilities on a similar scale to the proposed acquisition of Avista. The Globe and Mail. "Avista is just the first U.S. deal, Hydro One CEO says." 21 Nov. 2017.

72 Electricity Act, ss. 48.2(5), 50.2.1.

73 Electricity Act, s. 48.2(6), (7). There are other conditions as well, such as complying with the *Securities Act*.



9 | Appendices

Appendix A: Pre-Sale Transactions

The Province, Hydro One and the OEFC completed a series of transactions before the initial sale of Hydro One to address the financial impacts of the departure tax. The FAO estimates that the pre-sale transactions had a neutral impact on the Province's surplus / (deficit) but a positive impact of \$1 billion to the Province's cash flow position (Table 9-1).

Table 9-1: Estimated Fiscal Impact of Hydro One Pre-Sale Transactions

\$ millions	Departure Tax	Equity Injection	Special Dividend	Total Impact
PILs Revenue	2,800	0	0	2,800
GBE Income	-2,800	0	0	-2,800
Annual Surplus / (Deficit)	0	0	0	0
PILs Revenue	2,800	0	0	2,800
Investment in GBE	0	-2,600	0	-2,600
Dividends Received	0	0	800	800
Cash Flow	2,800	-2,600	800	1,000
Cash	2,800	-2,600	800	1,000
GBE Investment	-2,800	2,600	-800	-1,000
Net Debt	0	0	0	0

Source: FAO.

Note: Numbers are rounded to the nearest hundred million.

The following provides more information on the pre-sale transactions:

- 1. Departure Tax.** Before the initial public offering (IPO), Hydro One did not pay corporate tax, but rather payments-in-lieu of taxes (PILs), which approximated the amount of corporate tax (both provincial and federal) that Hydro One would have paid had it not been wholly owned by the Province. After the IPO, Hydro One became subject to the corporate tax regime and no longer paid PILs to the

Province.⁷⁴ However, immediately before the sale, Hydro One paid the OEFC \$2.6 billion in PILs. This payment was a requirement under the Electricity Act⁷⁵ and is known as the departure tax because Hydro One was “departing” from the PILs regime to the corporate tax regime.

- Hydro One also paid \$191 million in additional PILs. This was to equate the value of the departure tax to the value of Hydro One’s deferred tax asset benefit. The FAO adds the \$2.6 billion and \$191 million payments to define the departure tax as \$2.8 billion.

2. Equity Injection. Immediately before the sale, the Province invested \$2.6 billion in Hydro One to help the company finance its payment of the departure tax. The Province records the value of Hydro One as an equity investment in its consolidated financial statements, so the investment is known as an equity injection. This transaction helped support the market value of Hydro One for the partial sale.

- For example, in the absence of the Province financing the departure tax, Hydro One would have incurred a cost of \$2.6 billion to pay the departure tax, which would have lowered the value of the company and sale proceeds, all else being equal.

3. Special Dividend. Immediately before the sale, Hydro One made a one-time dividend payment to the Province in the amount of \$800 million. This payment was to align Hydro One’s actual and regulated capital structures. Maintaining a certain debt to capital ratio is important because the Ontario Energy Board (OEB) determines electricity rates based on a fixed debt to capital ratio of about 60 per cent for Hydro One.

- As such, Hydro One issued \$800 million in debt and paid the Province \$800 million in dividends, which served to align the company’s actual and regulated capital structures.

⁷⁴ The effect of the federal *Income Tax Act*, s. 149(1)(d.1) and the provincial *Corporations Tax Act*, s. 57(1)(a) is that Hydro One was subject to the corporate tax regime after the Province owned less than 90 per cent of Hydro One.

⁷⁵ Electricity Act, ss. 89, 90 and 96(1) and Ontario Regulation 207/99, s. 16.1.

Appendix B: Development of this Report

Authority

The Financial Accountability Officer accepted a request from a member of the Legislative Assembly to undertake the analysis presented in this report under paragraph 10(1)(b) of the *Financial Accountability Officer Act, 2013*.

Key Questions

The following key questions were used as a guide while undertaking research for this report:

- What is the fiscal impact to the Province of the partial sale of Hydro One?
 - What were the final proceeds generated by the Province?
 - Of the final proceeds, what amount was cash vs. non-cash, and what are the implications for the financial position of the Province?
 - How did the sale impact the Province’s surplus/deficit and net debt?
 - How much has OEFC electricity sector debt been reduced as a result of the sale?
 - How did the transactions related to the sale, including the \$2.6 billion departure tax and \$800 million special dividend, impact the Province’s fiscal position?
 - What is the projected long-term effect of the sale compared to what would have happened if the Province generated equivalent funds using traditional borrowing?
- How will the proceeds from the sale of Hydro One be used to finance infrastructure projects?
 - What portion of the proceeds (cash and non-cash) was allocated to the Trillium Trust, and what are the implications, if any, of funding infrastructure projects with non-cash proceeds?
 - What infrastructure projects are being financed by the sale proceeds?
 - Are the infrastructure projects being financed by the sale of Hydro One new projects, or existing projects already included in the Province’s fiscal plan?
- How will the sale of Hydro One affect Ontario ratepayers?

- How will payment of OEFC debt using the proceeds generated by the sale affect Ontario ratepayers?
- How could changes in Hydro One’s capital structure (debt/equity) resulting from the sale and related transactions affect Ontario ratepayers?
- What is the expected impact to the Province and Ontario ratepayers from Hydro One’s proposed acquisition of Avista?
 - How would the acquisition affect the Province’s investment in Hydro One?
 - How would changes to Hydro One’s business that is not regulated in the Ontario market affect Ontario ratepayers?

Scope

This report does not seek to assess the merits of the decision to sell Hydro One.

Methodology

This report has been prepared with the benefit of information provided by, and meetings with staff from, the Ministries of Finance and Energy, Treasury Board Secretariat and the Ontario Financing Authority, and a review of relevant literature and other publicly available information. Specific sources are referenced throughout.

The FAO’s estimate of the fiscal impact of the partial sale of Hydro One is subject to uncertainties. For example, the FAO’s estimate of the fiscal impact would improve (i.e. improve the surplus / (deficit) overall) should interest rates increase above forecasted levels, because the Province would save more on its displaced borrowing. Also, the FAO excludes any assumptions about changes in the profitability of Hydro One. An improvement in Hydro One’s profitability as a result of the sale would improve the FAO’s estimate of the fiscal impact.

All dollar amounts are in Canadian current dollars (i.e. not adjusted for inflation) unless otherwise noted.

