

# **WHY THE PROVINCE OF ONTARIO SHOULD NOT SELL PART OF HYDRO ONE**

**Prepared for  
Canadian Union of Public Employees**

**Prepared by  
Dr. David W. Peters and Dr. Douglas D. Peters**

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## Executive Summary

In this report we examine the question of whether the sale of a portion of Hydro One would be a good financial decision for the Province of Ontario. We estimated the impact on Ontario's income of selling either 15% or 60% of Hydro One to outside investors.

We estimated that outside investors would require a return of 8% to invest in Hydro One. The return investors require is significantly higher than the cost of Ontario's long-term bonds, which we estimate at 2.9%.

The pre-tax income of Hydro One was \$803 million in 2013. We expect the pre-tax income might be \$851.9 million in 2015.

If 15% of Hydro One were sold to outside investors, their share of the income would be \$127.8 million. Discounting this income at 8%, we believe that the sale could raise \$1,597.3 million before issuance costs, or \$1,485.5 million after issuance costs. We believe that the sale of 15% of Hydro One could save the Province of Ontario \$43.1 million in interest costs, if proceeds were used to reduce long-term debt.<sup>1</sup> However, it would cost the Province of Ontario \$127.8 million in lost revenue from earnings of Hydro One that would go to the new investors. Thus the net loss of income to the Province of Ontario would be \$84.7 million per year.

If 60% of Hydro One were sold to outside investors, their share of the income would be \$511.1 million. Discounting this income at 8%, we believe that the sale could raise \$6,389.2 million before issuance costs, or \$5,942 million after issuance costs. We believe that the sale of 60% of Hydro One could save the Province of Ontario \$172.3 million in interest costs if proceeds were used to reduce long-term debt. However, it would cost the Province of Ontario \$511.1 million in lost revenue from earnings of Hydro One that would go to the new investors. Thus the net loss of income to the Province of Ontario would be \$338.8 million per year.

The electricity transmission and distribution business has been publicly owned and operated successfully in Ontario for nearly a century. It was not appropriate to sell the electricity business to outside investors in the past and we do not believe it is appropriate for the Province of Ontario to sell it now.

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<sup>1</sup> We have been advised by legal counsel that the proceeds from the proceeds must be paid to OEFC. If the proceeds were paid to OEFC, it would be reasonable to assume that OEFC would pay down its long-term debt, which would reduce OEFC's interest expense, and reduce the interest expense of the Province of Ontario since the province uses the consolidation method to account for OEFC. The effect on the province's interest expense will be similar whether the proceeds are used to pay the province's debt or the OEFC debt.

## **About Hydro One**

Hydro One was set up in 1999 as a result of the restructuring of Ontario Hydro. Hydro One has three major business segments: (1) Transmission, (2) Distribution, and (3) Other, primarily consisting of its telecommunications business. The transmission business segment operates 97% of the high transmission grid throughout Ontario. The distribution segment provides local distribution of electricity to about 1.3 million customers in Ontario. The distribution segment consists of Hydro One Brampton (which serves customers in the urban area of Brampton) and the distribution part of Hydro One Networks (which serves customers mostly in rural areas). At the end of 2013, Hydro One had assets of \$21.6 billion, shareholder equity of \$7.1 billion, and net income was \$803 million in 2013. Hydro One is 100% owned by the Province of Ontario.

## **The Question of Selling Part of Hydro One**

The Premier's Advisory Council on Government Assets submitted their initial report, "Retain & Gain: Making Assets Work Better for Taxpayers and Consumers," on November 13, 2014. Their report stated, "The Advisory Council on Government Assets was charged by the Premier to review the Liquor Control Board of Ontario (LCBO), Hydro One and Ontario Power Generation (OPG) and to recommend ways to maximize their value to the people of Ontario." The Council submitted their final report, "Balance: Improving Performance and Unlocking Value in the Electricity Sector in Ontario," on April 16, 2015. We are concerned only with the report's recommendations about Hydro One.

The report makes two significant recommendations regarding Hydro One. The report recommends that Hydro One Brampton be merged with three local distribution companies in the Greater Toronto and Hamilton Area. The report recommends that up to 60% of Hydro One be sold to outside investors through an initial public offering. The report recommends that the sale of 60% of Hydro One be done in stages: selling 15% initially, and then selling more shares until 60% is reached.

The final report states on page 22, "Concern has been expressed to the Council that the partial divestiture of Hydro One will result in front-end gains to the Province but a long-term loss...because the government would be selling assets that earn a 10% return on their book value and getting no material long-term income stream in return." The report goes on to state that the result will pay down debt and that such a debt repayment will allow the Province to make investments "in economically productive public transit and transportation infrastructure – investments that would not have otherwise been possible." This seems, based on the specious analysis, that Ontario is near its limit to raise bond funds for very productive government investments in transport. At a time when the Canadian federal government's financing needs are minimal, Ontario is the premier government in Canada and therefore should have no

problem borrowing in the long-term bonds market. This is supported by the recent 30-year bond issue that was sold at a rate of 2.9 per cent yield.

It should be noted that any structure of Hydro One should not necessarily require a public issue of new stocks to the public. Surely the structuring of Hydro One can be done without a public stock issue, if the Ontario Government wants it to do so.

The Council believes that Hydro One could have a value in the marketplace of \$13.5 billion to \$15 billion if entirely sold. We think that the Council is too optimistic, and that \$10.6 billion is a more likely valuation.

## **Historical Perspective on Public versus Private Ownership of Electrical Utilities**

The issue of public versus private ownership of electrical utilities in Ontario is one that started more than a century ago. At the beginning of the 20<sup>th</sup> century, electricity generation and transmission was controlled by a number of privately owned companies that did not compete with each other. Privately owned monopolies were supported by the Liberal government, in power prior to 1905. The opposition Conservative party supported the concept of public ownership of electric power. One of the main problems at the time in Toronto was that Toronto Electric Light Company was purchasing coal at very high prices from the United States, and using coal to generate electricity.<sup>2</sup> It was also believed that the profits of the privately owned electric utilities were far too high and that publicly-owned electric utilities could deliver electricity to users at a much lower cost.

Public versus private ownership was one of the important issues in the 1905 Ontario election. The Conservative party, under James Whitney, won that election and one of those Conservatives elected was Adam Beck. Whitney made Beck a minister and he was charged with the question of electric power. In their book *Hydro*, Swift and Stewart, quoting from a newspaper of the day, state, "The Toronto *World* warned that 'the pure white light generated by God's masterpiece, Niagara Falls, should not fall into the hands of middlemen like Pellatt. Every citizen, however humble, should be able to have electricity at home, at cost. We want no electricity barons here.'"<sup>3</sup>

The Hydro-Electric Power Commission was set up in 1906 with Adam Beck as chairman. From 1906 to the early 1920s, public and private ownership of the electricity business co-existed. Privately owned electricity generators were bought out in the early 1920s on the orders of Adam Beck.

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<sup>2</sup> Toronto Electric Light Company was owned by Henry Pellatt, the original owner of Casa Loma.

<sup>3</sup> Swift, Jamie and Stewart, Keith, *Hydro: The Decline and Fall of Ontario's Electric Empire*, Between the Lines, 2004.

## **Return Investors Would Require to Invest in Hydro One and Ontario's Cost of Long-Term Financing**

In assessing whether the Province of Ontario should sell part of Hydro One, a critical question to be answered is what investors would be willing to pay for the investment. That is determined by the rate of return outside investors would require on an equity investment in Hydro One. Since Hydro One does not have any publicly traded stock, the answer is not explicitly evident. Our analysis of the return that investors would require is shown in Appendix A. We concluded that investors will only invest in Hydro One if they can expect a rate of return of 8%.

We estimated the cost of long-term financing for the Province of Ontario to be 2.9%. In February 2015, The Province of Ontario issued a long-term bond with a coupon rate of 2.9% that matures in February 2046.

## **The Effect on the Province of Ontario of Selling Part of Hydro One to Outside Investors**

In this section, we estimate the effect on the Province of Ontario of a decision to sell either 15% or 60% of Hydro One to outside investors and using the proceeds to pay off long-term bonds. If the Province of Ontario decided to sell either 15% or 60% of Hydro One to outside investors, there would be two effects on Ontario's income:

(1) Interest costs would be reduced since the Province of Ontario could reduce its use of long-term bonds. We have been advised that the proceeds would have to be paid to Ontario Electricity Financial Corporation (OEFC) and would be used to pay off the OEFC's debt. Since the Province of Ontario consolidates OEFC, the impact will be the same whether the proceeds are used to pay off the Province of Ontario's debt or the OEFC debt. We estimate the cost of the long-term bonds to be 2.9% per year.

(2) The Province's share of Hydro One's income would be reduced.<sup>4</sup> In calculating this, we have assumed that the investors require a return of 8% to buy stock in Hydro One, and that the stock sale involves stock issuance costs equal to 7% of value.<sup>5</sup>

The net income of Hydro One was \$803 million in 2013, but we expect that it might be \$851.9 million in 2015. If 15% of the business were sold off, the new investors'

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<sup>4</sup> The Province of Ontario uses the modified equity method to account for its investment in Hydro One. Under this accounting method, the income of Hydro One flows through to the income statement of the Province of Ontario. This modified equity method is mentioned on page 53 of Retain and Gain: Making Ontario's Assets Work Better for Taxpayers and Consumers Premier's Advisory Council on Government Assets Initial Report, November 13, 2014.

<sup>5</sup> Stock issuance costs include fees charged by investment bankers and lawyers and any other costs incremental to the issuance of shares to investors. We have assumed that stock issuance costs will be 7%, which is typical for an IPO of this size.

share of income would be \$127.8 million. Discounting this income at 8%, we believe the sale of 15% of Hydro One would raise \$1,597.3 million before issuance costs, or \$1,485.5 million after issuance costs. By raising \$1,485.5 million through the sale, the province's long-term borrowing could be reduced by the same amount. With long-term financing costs of 2.9%, this means, the province could reduce interest expenses by \$43.1 million per year. If 60% of Hydro One were sold off, the new investors' share of income would be \$511.1 million, the sale would raise \$6,389.2 million before issuance costs or \$5,942.0 million after issuance costs, and the province's interest expenses would decrease by \$172.3 million.

TABLE 1		
EFFECT OF SELLING PART OF HYDRO ONE ON THE ANNUAL INCOME OF THE PROVINCE OF ONTARIO		
	Sale of 15%	Sale of 60%
Reduction in Interest Expense per Year	\$43,100,000	\$172,300,000
Reduction in Income from Hydro One	127,800,000	511,100,000
Net Effect on the Income of the Province of Ontario	(84,700,000)	(338,800,000)

The table above suggests that a sale of 60% of Hydro One would have a negative impact on the annual income of Ontario in the amount of \$338.8 million per year.

## **Appendix A: Analysis of Return Investors in Hydro One Would Require**

In considering an investment in Hydro One, the amount investors would pay would be determined by the return they would expect from that investment. Investors are likely to require a similar return on such an investment as the return they require on stocks of similar-risk stocks in the same industry. There are several electrical utilities in Canada that have publicly traded stock where it is possible to estimate the return shareholders require from publicly available data.

Our methodology in estimating the return investors would require on the stock of Hydro One is as follows:

- (1) Find a number of comparable electrical utilities where stock market data is available.
- (2) Calculate the rate of return investors are requiring on these stocks.
- (3) Determine a required return on an investment in Hydro One from the information on required returns for the other electrical utilities.

We looked at several electrical utility companies in Canada that have publicly traded stock. We excluded companies that are relatively new, companies that have been open-ended or income trusts, and companies that are subsidiaries of other publicly-traded utility companies. The final group of companies that we examined were:

- (1) ATCO Limited<sup>6</sup>
- (2) Emera Incorporated<sup>7</sup>
- (3) Fortis Incorporated<sup>8</sup>
- (4) Transalta Corporation<sup>9</sup>

We used four approaches to estimating required returns on stocks are:

- (1) Dividend Growth Model Approach (using dividend growth rates)
- (2) Dividend Growth Model Approach (using earning growth rates)
- (3) Dividend Growth Model Approach (using earnings retention)
- (4) Prospective Earnings Divided by Price

A fifth approach that could have been used is the Security Market Line approach. The security market line approach assumes that investors determine required returns using the capital asset pricing model. The security market line approach does not work very well with Canadian stock market data so we concentrated on the other approaches.

The dividend growth model approaches assumes that investors value stocks using the Gordon valuation model.<sup>10</sup> The dividend growth model says that the required return on a stock should be equal to its prospective dividend yield plus the future growth rate of dividends. There are three variations of this model that use different ways to compute the future growth rate of dividends.

In the Dividend Growth Model (using dividend growth rates) approach, we estimate the returns investors require by adding the prospective dividend yield in the upcoming year to the historical growth rate of dividends. This approach assumes that historical dividend growth is indicative of future dividend growth.

In the Dividend Growth Model (using earnings growth rates) approach, we estimate the returns investors require by adding the prospective dividend yield in the upcoming year to the historical growth rate of earnings. This approach assumes that historical earnings growth is indicative of future dividend growth. The theoretical support for this approach is that earnings represent the ability to pay future dividends while dividend payments are an amount managed by boards of directors.

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<sup>6</sup> ATCO Limited is involved in electricity power generation, the transmission and distribution of both electricity and natural gas. Its largest operations are in Alberta.

<sup>7</sup> Emera Inc. is involved in the generation, transmission and distribution of electricity as well as the delivery of natural gas. It has operations in Nova Scotia, New Brunswick and Maine.

<sup>8</sup> Fortis Inc. is involved in electricity and natural gas distribution. It has operations in British Columbia, Alberta, Newfoundland, Prince Edward Island, Ontario and the Caribbean.

<sup>9</sup> Transalta Corporation is involved in electricity generation and energy marketing. It has operations in Canada, USA and Australia.

<sup>10</sup> See Gordon, Myron J. (1959). "Dividends, Earnings and Stock Prices," Review of Economics and Statistics, Vol. 41, No. 2, pp. 99–105.

In the Dividend Growth Model (using earnings retention) approach, we estimate the returns investors require by adding the prospective dividend yield in the upcoming year to the growth rate calculated as the product of return on equity and the earnings retention ratio. This approach assumes that the ratio of earnings retained to shareholders' equity is indicative of future dividend growth.

The least sophisticated approach is the Prospective Earnings Divided by Price approach. In this approach, the required return on a stock is determined by dividing prospective earnings by the stock price.

The results using the different approaches for the 4 electrical utility companies are shown in Table 2.

Approach	Atco	Emera	Fortis	Transalta	Average
Dividend Growth Model Using Historical Dividend Growth Rates	11.54%	9.12%	12.71%	5.05%	9.61%
Dividend Growth Model Using Historical Earnings Growth Rates	12.73%	12.98%	6.23%	1.49%	8.36%
Dividend Growth Model Using Earnings Retention	12.87%	12.10%	3.89%	2.96%	7.95%
Prospective Earnings / Price	9.20%	7.68%	3.78%	4.14%	6.20%
Average	11.58%	10.47%	6.65%	3.41%	8.03%
Source: Computed from information in company annual reports and Yahoo Canada Finance website.					

The average required returns using the four approaches were as follows:

Dividend Growth Model using on historical dividend growth rates: 9.61%

Dividend Growth Model using historical earnings growth rates: 8.36%

Dividend Growth Model using earnings retention: 7.95%

Prospective Earnings / Price Model: 6.20%.

The average of the four approaches was 8.03%. We believe the average required return is close to 8%. We believe that investors would also require a return of 8% to invest in Hydro One. We believe that investors will want to apply a higher price/earnings ratio to Hydro One than to some of the other electricity companies because Hydro One does not have the track record of delivering growth that some of these other companies have.

## Authors

**Dr. David W. Peters** teaches Business Administration at the University of Guelph-Humber in Toronto, Ontario. He has written on Canadian bank capital regulation, bank management issues and investments and acted as a consultant on risk management issues. He has a PhD in Finance from Queen's University in Kingston, Ontario and a Bachelor of Commerce degree from University of Windsor.

**Dr. Douglas D. Peters** is an economic and financial consultant. He has written on financial, economic and political issues. For twenty-six years he was the Chief Economist of The Toronto-Dominion Bank and a Senior Vice President. He was the Member of Parliament for Scarborough East and Secretary of State (Finance) in the Chretien government from 1993 to 1997. He has a PhD from the Wharton School of Business of the University of Pennsylvania in Philadelphia and a Bachelor of Commerce degree from Queen's University in Kingston.