

From: [Bruno Amara](#)
To: [John Kim](#)
Cc: [Esther Jeon](#); [Shajee Kathirgamanathan](#); [Gavin He](#)
Subject: FW: Liquidity Note
Date: Monday, April 23, 2018 2:43:04 PM
Attachments: [OPG Funding and Liquidity update April 2018-v12_clean.docx](#)

Hi John

Revised note attached.

Bruno

From: Shajee Kathirgamanathan
Sent: Monday, April 23, 2018 2:09 PM
To: Esther Jeon <Esther.Jeon@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: Liquidity Note

Hi Esther,

Gavin and I added a bit more on the FHT part.

Please see attached.

File found here:

S:\Users\CEF\Hydro 2018\OPG\Funding and Liquidity\April 2018 - OEFC Board meeting

Thanks,
Shajee

Shajee Kathirgamanathan

Office: 416-325-1402 | Mobile: 647-294-3359
shajee.kathirgamanathan@ofina.on.ca

From: Esther Jeon
Sent: Monday, April 23, 2018 12:34 PM
To: Gavin He <Gavin.He@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: RE: Liquidity Note

Hi all,

I edited the most recent version sent by Gavin and updated the business plan section.
Please take a look, thank you!

-Esther

From: Gavin He

Sent: Monday, April 23, 2018 12:12 PM

To: Bruno Amara <Bruno.Amara@ofina.on.ca>; Esther Jeon <Esther.Jeon@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>

Subject: RE: Liquidity Note

Hi All,

I made some further updates to the note, see attached.

Shajee – for the notes offering last Wednesday, do we know how much was issued by subordinate debt and junior subordinate debt?

Regards,
Gavin He

From: John Kim

Sent: Monday, April 23, 2018 11:56 AM

To: Gavin He <Gavin.He@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>

Cc: Esther Jeon <Esther.Jeon@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>

Subject: RE: Liquidity Note

Could we update for that pls?

From: Gavin He

Sent: Monday, April 23, 2018 11:56 AM

To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>

Cc: Esther Jeon <Esther.Jeon@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>

Subject: RE: Liquidity Note

Hi John,

Shajee and I were talking about this had the same question too. It doesn't look like the notes OPG issued are matching the assets purchased.

Regards,
Gavin He

From: John Kim
Sent: Monday, April 23, 2018 11:50 AM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Esther Jeon <Esther.Jeon@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Liquidity Note

Also, on the FHT section, if \$1.2 bn is the assets purchased, why is the senior note on \$500mn? Wouldn't it be 51%?

From: John Kim
Sent: Monday, April 23, 2018 11:41 AM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Esther Jeon <Esther.Jeon@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Liquidity Note

Thanks.....any issue with the attached?

From: Bruno Amara
Sent: Monday, April 23, 2018 11:25 AM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Esther Jeon <Esther.Jeon@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: Liquidity Note

Hi John

Esther has drafted the attached OPG liquidity note. SIFB and Capital markets have provided their input.

Bruno

Bruno Amara
Sr. Manager, Financial and Regulatory Analysis
Electricity Finance Branch
Corporate and Electricity Finance Division
Ontario Financing Authority

Tel: 416-325-1489
Email: bruno.amara@ofina.on.ca

OPG Funding and Liquidity Status Update
OEFC Board Meeting – April 27, 2018

Purpose

The purpose of this report is to outline the status of OPG's funding and liquidity position on an on-going basis, as directed at the December 2004 OEFC Board meeting.

Current Status

- As of February 2018, according to OPG's business plan, OPG projected a \$273 million in cash at the end of 2018.
 - o As of December 31, 2017, OPG had a cash position of \$234 million. In 2018, OPG expects to make dividend payments of over \$475 million to the Shareholder with respect to the sale of OPG's head office and their Lakeview site.
 - o In March 2018, OPG paid \$283M in net proceeds from the head office properties sale to the Province as prescribed in regulation under the *Trillium Trust Act, 2014*.
 - o OPG had a \$186 million cash position at the end of 2016.
- In June 2016, OEFC entered into a credit facility agreement with OPG for the latter to borrow up to \$700 million for the purpose of financing general corporate purposes effective January 1, 2017 to the end of 2017, including for the Darlington refurbishment project. The Minister's directive from June 2016 allowed OEFC to extend the term of the credit facility to the end of 2018, and increase the amount of the credit facility based on the total financing amount identified in OPG's 2016-2018 Business Plan, following concurrence by the Minister of Energy. OPG obtained concurrence for its Business Plan in November 2016
 - o OPG has also received concurrence from the Ministry of Energy for its 2018-2021 Business Plan. The Business Plan stated that as of December 31, 2017 they borrowed \$1,301 million of general corporate debt, of which \$800 million was from the credit facility. The 2018-2021 Business Plan also stated that, OPG spent \$1,249 million in 2017 and projects to spend \$1,231 million in 2018 on the Darlington Refurbishment project.
 - o In September 2017, amendments to the credit facility were finalized to increase the facility to \$2.35 billion and extend the expiry date to December 31, 2018.
- In 2017, OPG borrowed a total of \$800 million under the credit facility. During the first quarter of 2018, they borrowed an additional \$600 million. The term of all of the borrowings is 30 years.

- OPG filed its regulated rate application in May 2016 for rates starting as at January 1, 2017 and covering a period of 5 years from 2017 to 2021. The Ontario Energy Board (OEB) issued their decision in December 2017, and their decision determined that new prices would be applied with an effective date of June 1, 2017.
 - o OPG recognized the impact of the OEB's decision in the fourth quarter of 2017, which resulted in a net revenue increase of approximately \$480 million related to the June 1, 2017 to December 31, 2017 period.
 - o In January 2018, OPG submitted a draft payment amounts order to the OEB that implemented the decision's findings into the final proposed regulated prices. The OEB is expected to issue the final payment amounts order in the first half of 2018, at which time OPG will begin to collect revenues based on new regulated prices. The OEB's approval of the final payment amounts order is not expected to have a material impact on the amount of net revenue recorded in the fourth quarter of 2017.
 - o In January 2018, OPG has filed a Notice of Motion to review and vary the OEB's decision of rates being effective June 1, 2017 instead of the requested date of January 1, 2017 and an oral hearing to present their arguments occurred on April 2017. This case is still currently being reviewed by the OEB.
 - o An amended OEB decision with respect to the Motion to Review could affect OPG's longer term liquidity outlook and net income related to the January 1, 2017 to May 31, 2017 period.
- OPG has been appointed the Financial Services Manager under the Ontario Fair Hydro Plan Act, 2017 (the Act) and, in December 2017, established the Fair Hydro Trust (the Trust) as the financing entity for the Act:
 - o As reported in OPG's Q4 2017 Financial Statement, in December 2017 the Trust purchased its first tranche of financing receivable assets from the Independent Electricity System Operator in the amount of approximately \$1.18 billion. In February 2018, the Trust issued a total of \$980 million in term debt funding with \$500 million of senior notes payable, \$382 million of subordinated debt and \$98 million of junior subordinated debt. This left \$199 million in OPG's warehouse funding facility.
 - o On March 22, 2018, OPG purchased the second tranche of financing receivable assets from the IESO in the amount of approximately \$460 million. On April 19, 2018, the Trust issued \$400 million of senior notes payable. The amounts of subordinated and junior subordinated debts along with the amounts left in the warehouse funding facility are still to be determined.
 - o On April 20, 2018, OPG purchased the third tranche of financing receivable assets from the Independent Electricity System Operator in the amount of approximately \$149 million. Additional note offerings are anticipated.

- **OPG Current Financial Outlook, based upon financing updates up to December 31, 2017:** (Note – numbers are subject to rounding)

<i>Calendar Years,(\$ millions)</i>	2017 Actual	Q1-Q4 2018 Forecast	2018 Forecast
Opening Cash	186	48	234
Cash from Operations	944	524	1,468
Approved Capital Expenditures	(1,853)	(213)	(2,066)
PS Term Deposit Maturity	70	(70)	-
Pre-tax Proceeds – Sale of Head Office	484	(484)	-
Pre-tax Proceeds – Sale of Lakeview Site	-	267	267
Acquisition of Fair Hydro Trust financing receivables	(1,179)	(1,147)	(2,326)
Maturing Debt	(1,103)	705	(398)
New Debt to OEFC and Additional Corporate Debt*	1,301	(110)	1,191
Issuance of Fair Hydro Trust long-term debt	601	583	1,184
Issuance of Class A Shares**	519	503	1,022
Commercial Paper	260	(60)	200
Distributions to Non-Controlling Interest	(15)	(7)	(22)
Capital Contribution from Non-Controlling Interest	19	(19)	-
Dividends (Net Proceeds of Distribution to Trillium Trust***)	-	(482)	(482)
Net Cash flow	48	(9)	39
Ending Cash	234	39	273

* Financing from OEFC for general corporate purposes including Darlington Refurbishment project. The current credit facility allows up to \$2.35 billion to the end of 2018 consistent with 2016-2018 OPG Business Plan. As of December 31, 2017 debt to OEFC totaled to \$800M and in Oct 2017 OPG issued \$500M of senior notes payable under a Medium Term Note Program for general corporate purposes.

** In December 2017, OPG issued non-voting Class A shares to the Province for its equity injection in the company, generating proceeds of \$519M. These proceeds were used by OPG to purchase the Fair Hydro Trust's subordinated debt in the amount of 44% of the total funding requirement for the Trust's acquisition of Investment Interest from the IESO in December 2017.

*** The Trillium Trust regulation for the head office properties was filed in March 2018, with OPG paying the net proceeds of approximately \$283M shortly after as a dividend to the Province. Note that the Trillium Trust regulation timing for the Lakeview site is likely to be in 2018. Analysis and verification of records in support of prescribed costs under the *Trillium Trust Act, 2014* needs to be undertaken.

Background

The following table provides the details of deferrals of debt and interest payments, refinancing, and new loans commencing from December of 2004.

Timing	Action	Details
July 2016 Board meeting	Received Minister's Directive on June 17, 2016, for general corporate purposes including Darlington Refurbishment project up to \$700 million. Directive provides approval for subsequent loans not totalling more than \$2.3 billion but is subject to concurrence by Shareholder with OPG's business plan, and to not exceed \$3 billion in total.	Under credit facility, loans shall have a term not exceeding thirty years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread based on a survey of market rates. Interest rate and term of each loan shall be determined by OEFC. Loan agreement signed on June 17, 2016. An amendment was signed on September 6, 2017 to increase the amount of the credit facility to \$1.5 billion in 2017 and \$850 million in 2018.
December 2014 Board meeting	Subject to receiving Minister's Directive for general corporate purposes including Darlington Refurbishment project up to \$800 million.	Under the credit facility, up to 50% of advances may have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Received Minister's directive on December 18, 2014. Loan agreement was signed on December 22, 2014.
December 2013 Board meeting	Received Minister's Directive for general corporate purposes including Darlington Refurbishment project up to \$500 million.	Under the credit facility, up to 50% of advances may have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on December 20, 2013.
April 2012 Board meeting	Received Minister's Directive for refinancing of maturing debt up to \$400 million.	Under the credit facility, advances up to \$200 million may have a term up to 30 years. The remaining \$200 million may have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on April 26, 2012.
April 2011 Board meeting	Received Minister's Directive for refinancing of maturing debt up to \$375 million.	Under the credit facility, each advance will have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on March 7, 2011.
September 2010 Board meeting	Received Minister's Directive for \$700 million loan to OPG for the Lower Mattagami project.	Under the credit facility each advance will have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on March 7, 2011.

Timing	Action	Details
September 2009 Board meeting	Subject to receiving Minister's directives, approved the refinancing of maturing debt up to \$970 million and an increase in the Niagara Tunnel loan to \$1.6 billion.	The refinancing debt facility will have a term of one year; each advance will have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Received Minister's directive on January 20, 2010 for refinancing up to \$970 million of maturing debt. Loan agreement signed March 8, 2010. Received Minister's directive on April 22, 2010 for increase in the Niagara Tunnel loan to \$1.6 billion and extension of the expiry date to December 2014. Amendment signed July 21, 2010.
June 2007 Board meeting	Pursuant to a Minister's directive dated June 11, 2007, approved a loan for up to \$950 million for refinancing debt issued to OEFC and a loan for up to \$500 million for general corporate requirements.	Structured to provide advances in tranches. The ability to draw on the refinancing facility to expire on Dec 31, 2009, and the general corporate requirements facility expired on March 31, 2008 (OPG has fully drawn on this facility). Each advance shall have a term up to 10 years. The interest rate is based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement for the general corporate requirements signed on June 14, 2007. Loan agreement for the refinancing maturing debt signed on July 6, 2007.
April 2006 Board meeting	Subject to receiving a Minister's directive, approved a loan for up to \$400 million for the Portlands project and a loan for up to \$50 for the Lac Seul project.	Structured to provide advances in tranches over a 3 year period. Each advance shall have a term as may be determined by the Chief Executive Officer of OEFC or his/her designate. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Minister's Directives dated October 25, 2006. Loan agreements for the Portlands and Lac Seul projects signed on December 6, 2006.
September 2005 Board meeting	Pursuant to the Minister's Directive dated August 18, 2005, approved loan for up to \$1 billion for the Niagara Tunnel project.	Structured to provide advances in tranches over a 5 year period commencing in 2005. Terms of each advance not to exceed 10 years. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement signed on September 21, 2005.

Timing	Action	Details
September 2005 Board meeting (cont'd)	Subject to receiving a Minister's Directive, approved a loan for up to \$95 million for the Thunder Bay conversion.	Structured to provide advances in tranches over a 2 year period commencing late 2005 or early 2006. Terms of each advance not to exceed 10 years. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Minister's Directive dated September 26, 2005. Loan agreement signed on November 14, 2005. In June 2006 the Government revoked its Directive to OPG on the Thunder Bay conversion project. OEFC and OPG terminated the loan agreement on September 29, 2006.
June 2005 Board meeting	OEFC Board was advised that OPG had approached OFA/OEFC to get funding indications for Niagara Tunnel Project. While the government had provided overall support for the Niagara Tunnel Project, OEFC Board advised that staff would be coming back to the board to request a loan once a directive had been obtained	
March 2005 Board meeting	Pursuant to a Minister's Directive, \$600 million in loans was approved to address OPG operating cash flow funding requirements from April 1, 2005 to March 31, 2006	Structured to provide for drawdowns in 1 or more tranches at market rates for terms ranging from 3 to 7 years. Rates determined by OEFC. In May 2005, OPG borrowed \$400 million, for a 7 year term at 5.715% (spread of 1.75% over the respective Canada bond)
	Loan approval for \$98 million to OPG for a 5 year term commencing September 22, 2005	Loan to offset interest payments on loans due that day and to be extended at market rates determined by OEFC. Subsequently, OPG declined this loan due to higher than expected revenues.
December 2004 Board meeting	Extend \$250 million March 22, 2005 debt maturity for another 5 years	Original average 5.62% borrowing cost maintained for extended loan
	Extend \$250 million September 22, 2005 debt maturity for another 5 years	Original average 5.62% borrowing cost maintained for extended loan
	Loan \$95 million to OPG for a 5 year term commencing Mar. 22, 2005	Loan to offset interest payments on loans due that day and 5.62% rate used for new loan

OPG Debt Maturity Schedule (at April 23, 2018, 2017):

Maturity Date	Coupon Rate (%)	Amount (\$ m)
Jul 22, 2018	5.497	50
Oct 22, 2018	6.325	20
Jan 22, 2019	6.178	40
Mar 22, 2019	5.651	100
Apr 22, 2019	5.635	75
Jul 22, 2019	5.184	65
Oct 22, 2019	4.857	85
Jan 22, 2020	4.618	50
Mar 22, 2020	4.679	230
Apr 22, 2020	4.954	65
Jul 22, 2020	4.658	35
Sep 22, 2020	4.391	230
Oct 22, 2020	4.094	50
Jan 22, 2021	4.573	40
Apr 22, 2021	4.633	35
Jul 22, 2021	4.152	50
Oct 22, 2021	3.985	60
Jan 22, 2022	3.583	40
Apr 22, 2022	3.521	35
Jul 22, 2022	2.981	45
Oct 22, 2022	3.163	30
Jan 22, 2023	3.27	20
Apr 22, 2023	2.961	20
Nov 22, 2026	3.037	50
Mar 22, 2041	5.397	150
Sep 22, 2041	4.74	150
Apr 22, 2042	4.356	200
Nov 22, 2046	4.028	50
Feb 22, 2047	4.122	200
Jun 22, 2047	3.648	100
Aug 22, 2047	3.858	100
Sep 22, 2047	4.066	400
Jan 22, 2048	3.874	200
Mar 22, 2048	3.997	400
Total Outstanding		3,470.0

Status of Project Financing (at April 23, 2018):

Project	Amount Authorized under Loan Agreement	Total Borrowing to Date	Expiry Date of Loan Agreement	Status of Project
Corporate Credit Facility	\$2.35 billion	\$1,400 million	Dec 31, 2018	-
Niagara Tunnel	\$1.6 billion	\$1,065 million	Dec 30, 2014	Completed
Portlands	\$400 million	\$390 million	Dec 29, 2009	Completed
Lac Seul	\$50 million	\$50 million	Dec 29, 2009	Completed
Lower Mattagami	\$700 million	-	June 30, 2016	Completed

Prepared by:
Electricity Finance Branch and Capital Market Division
April 23, 2018

From: [Bruno Amara](#)
To: [John Kim](#)
Cc: [Esther Jeon](#); [Shajee Kathirgamanathan](#); [Gavin He](#)
Subject: Liquidity Note
Date: Monday, April 23, 2018 11:25:22 AM
Attachments: [OPG Funding and Liquidity update April 2018-v09.docx](#)

Hi John

Esther has drafted the attached OPG liquidity note. SIFB and Capital markets have provided their input.

Bruno

Bruno Amara
Sr. Manager, Financial and Regulatory Analysis
Electricity Finance Branch
Corporate and Electricity Finance Division
Ontario Financing Authority

Tel: 416-325-1489
Email: bruno.amara@ofina.on.ca

OPG Funding and Liquidity Status Update
OEFC Board Meeting – April 27, 2018

Purpose

The purpose of this report is to outline the status of OPG's funding and liquidity position on an on-going basis, as directed at the December 2004 OEFC Board meeting.

Current Status

- As of December 31, 2017, OPG had a cash position of \$234 million. In 2018, OPG expects to make dividend payments of over \$475 million to the Shareholder with respect to the sale of OPG's head office and their Lakeview site.
 - o In March 2018, OPG paid \$283M in net proceeds from the head office properties sale to the Province as prescribed in regulation under the *Trillium Trust Act, 2014*.
 - o OPG had a \$186 million cash position at the end of 2016.
- In June 2016, OEFC entered into a credit facility agreement with OPG for the latter to borrow up to \$700 million for the purpose of financing general corporate purposes effective January 1, 2017 to the end of 2017, including for the Darlington refurbishment project. The Minister's directive from June 2016 allowed OEFC to extend the term of the credit facility to the end of 2018, and increase the amount of the credit facility based on the total financing amount identified in OPG's 2016-2018 Business Plan, following concurrence by the Minister of Energy. OPG obtained concurrence for its Business Plan in November 2016
 - o OPG has also received concurrence from the Ministry of Energy for its 2017-2019 Business Plan. The Business Plan projects a borrowing need of \$1,750 million in 2017 (\$1,500 million in 2016-18 Business Plan) and \$650 million total in 2018 (\$850 million in 2016-18 Business Plan) from the credit facility. This change, in aggregate, is close to the approved amounts of the Minister's directive between 2017 and 2018, and the shift in the timing of about \$200 million from 2018 to 2017 is consistent with the Directive on the total financing amount. In the 2017-2019 Business Plan, OPG is expected to spend \$1,152 million in 2017 and \$1,113 million in 2018 on the Darlington Refurbishment project.
 - o In September 2017, amendments to the credit facility were finalized to increase the facility to \$2.35 billion and extend the expiry date to December 31, 2018.
- In 2017, OPG borrowed a total of \$800 million under the credit facility. During the first quarter of 2018, they borrowed an additional \$600 million. The term of all of the borrowings is 30 years.

- OPG filed its regulated rate application in May 2016 for rates starting as at January 1, 2017 and covering a period of 5 years from 2017 to 2021. The Ontario Energy Board (OEB) issued their decision in December 2017, and their decision determined that new prices would be applied with an effective date of June 1, 2017.
 - o OPG recognized the impact of the OEB's decision in the fourth quarter of 2017, which resulted in a net revenue increase of approximately \$480 million related to the June 1, 2017 to December 31, 2017 period.
 - o In January 2018, OPG submitted a draft payment amounts order to the OEB that implemented the decision's findings into the final proposed regulated prices. The OEB is expected to issue the final payment amounts order in the first half of 2018, at which time OPG will begin to collect revenues based on new regulated prices. The OEB's approval of the final payment amounts order is not expected to have a material impact on the amount of net revenue recorded in the fourth quarter of 2017.
 - o In January 2018, OPG has filed a Notice of Motion to review and vary the OEB's decision of rates being effective June 1, 2017 instead of the requested date of January 1, 2017 and an oral hearing to present their arguments occurred on April 2017. This case is still currently being reviewed by the OEB.
 - o An amended OEB decision with respect to the Motion to Review could affect OPG's longer term liquidity outlook and net income related to the January 1, 2017 to May 31, 2017 period.
- OPG has been appointed the Financial Services Manager under the Ontario Fair Hydro Plan Act, 2017 (the Act) and, in December 2017, established the Fair Hydro Trust (the Trust) as the financing entity for the Act:
 - o As reported in OPG's Q4 2017 Financial Statement, in December 2017 the Trust purchased its first tranche of financing receivable assets from the Independent Electricity System Operator in the amount of approximately \$1.2 billion. In February 2018, the Trust issued \$500 million of senior notes payable maturing in 2033.
 - o On March 22, 2018, OPG purchased the second tranche of financing receivable assets from the IESO in the amount of approximately \$460 million.
 - o On April 19, 2018, the Trust issued \$400 million of senior notes payable maturing in 2038.
 - o On April 20, 2018, OPG purchased the third tranche of financing receivable assets from the Independent Electricity System Operator in the amount of approximately \$149 million.

- **OPG Current Financial Outlook, based upon financing updates up to December 31, 2017:** (Note – numbers are subject to rounding)

<i>Calendar Years,(\$ millions)</i>	2017 Actual	Q1-Q4 2018 Forecast	2018 Forecast
Opening Cash	186	48	234
Cash from Operations	944	524	1,468
Approved Capital Expenditures	(1,853)	(213)	(2,066)
PS Term Deposit Maturity	70	(70)	-
Pre-tax Proceeds – Sale of Head Office	484	(484)	-
Pre-tax Proceeds – Sale of Lakeview Site	-	267	267
Acquisition of Fair Hydro Trust financing receivables	(1,179)	(1,147)	(2,326)
Maturing Debt	(1,103)	705	(398)
New Debt to OEFC and Additional Corporate Debt*	1,301	(110)	1,191
Issuance of Fair Hydro Trust long-term debt	601	583	1,184
Issuance of Class A Shares**	519	503	1,022
Commercial Paper	260	(60)	200
Distributions to Non-Controlling Interest	(15)	(7)	(22)
Capital Contribution from Non-Controlling Interest	19	(19)	-
Dividends (Net Proceeds of Distribution to Trillium Trust***)	-	(482)	(482)
Net Cash flow	48	(9)	39
Ending Cash	234	39	273

* Financing from OEFC for general corporate purposes including Darlington Refurbishment project. The current credit facility allows up to \$2.35 billion to the end of 2018 consistent with 2016-2018 OPG Business Plan. As of December 31, 2017 debt to OEFC totaled to \$800M and in Oct 2017 OPG issued \$500M of senior notes payable under a Medium Term Note Program for general corporate purposes.

** In December 2017, OPG issued non-voting Class A shares to the Province for its equity injection in the company, generating proceeds of \$519M. These proceeds were used by OPG to purchase the Fair Hydro Trust's subordinated debt in the amount of 44% of the total funding requirement for the Trust's acquisition of Investment Interest from the IESO in December 2017.

*** The Trillium Trust regulation for the head office properties was filed in March 2018, with OPG paying the net proceeds of approximately \$283M shortly after as a dividend to the Province. Note that the Trillium Trust regulation timing for the Lakeview site is likely to be in 2018. Analysis and verification of records in support of prescribed costs under the *Trillium Trust Act, 2014* needs to be undertaken.

Background

The following table provides the details of deferrals of debt and interest payments, refinancing, and new loans commencing from December of 2004.

Timing	Action	Details
July 2016 Board meeting	Received Minister's Directive on June 17, 2016, for general corporate purposes including Darlington Refurbishment project up to \$700 million. Directive provides approval for subsequent loans not totalling more than \$2.3 billion but is subject to concurrence by Shareholder with OPG's business plan, and to not exceed \$3 billion in total.	Under credit facility, loans shall have a term not exceeding thirty years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread based on a survey of market rates. Interest rate and term of each loan shall be determined by OEFC. Loan agreement signed on June 17, 2016. An amendment was signed on September 6, 2017 to increase the amount of the credit facility to \$1.5 billion in 2017 and \$850 million in 2018.
December 2014 Board meeting	Subject to receiving Minister's Directive for general corporate purposes including Darlington Refurbishment project up to \$800 million.	Under the credit facility, up to 50% of advances may have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Received Minister's directive on December 18, 2014. Loan agreement was signed on December 22, 2014.
December 2013 Board meeting	Received Minister's Directive for general corporate purposes including Darlington Refurbishment project up to \$500 million.	Under the credit facility, up to 50% of advances may have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on December 20, 2013.
April 2012 Board meeting	Received Minister's Directive for refinancing of maturing debt up to \$400 million.	Under the credit facility, advances up to \$200 million may have a term up to 30 years. The remaining \$200 million may have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on April 26, 2012.
April 2011 Board meeting	Received Minister's Directive for refinancing of maturing debt up to \$375 million.	Under the credit facility, each advance will have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on March 7, 2011.
September 2010 Board meeting	Received Minister's Directive for \$700 million loan to OPG for the Lower Mattagami project.	Under the credit facility each advance will have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on March 7, 2011.

Timing	Action	Details
September 2009 Board meeting	Subject to receiving Minister's directives, approved the refinancing of maturing debt up to \$970 million and an increase in the Niagara Tunnel loan to \$1.6 billion.	The refinancing debt facility will have a term of one year; each advance will have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Received Minister's directive on January 20, 2010 for refinancing up to \$970 million of maturing debt. Loan agreement signed March 8, 2010. Received Minister's directive on April 22, 2010 for increase in the Niagara Tunnel loan to \$1.6 billion and extension of the expiry date to December 2014. Amendment signed July 21, 2010.
June 2007 Board meeting	Pursuant to a Minister's directive dated June 11, 2007, approved a loan for up to \$950 million for refinancing debt issued to OEFC and a loan for up to \$500 million for general corporate requirements.	Structured to provide advances in tranches. The ability to draw on the refinancing facility to expire on Dec 31, 2009, and the general corporate requirements facility expired on March 31, 2008 (OPG has fully drawn on this facility). Each advance shall have a term up to 10 years. The interest rate is based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement for the general corporate requirements signed on June 14, 2007. Loan agreement for the refinancing maturing debt signed on July 6, 2007.
April 2006 Board meeting	Subject to receiving a Minister's directive, approved a loan for up to \$400 million for the Portlands project and a loan for up to \$50 for the Lac Seul project.	Structured to provide advances in tranches over a 3 year period. Each advance shall have a term as may be determined by the Chief Executive Officer of OEFC or his/her designate. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Minister's Directives dated October 25, 2006. Loan agreements for the Portlands and Lac Seul projects signed on December 6, 2006.
September 2005 Board meeting	Pursuant to the Minister's Directive dated August 18, 2005, approved loan for up to \$1 billion for the Niagara Tunnel project.	Structured to provide advances in tranches over a 5 year period commencing in 2005. Terms of each advance not to exceed 10 years. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement signed on September 21, 2005.

Timing	Action	Details
September 2005 Board meeting (cont'd)	Subject to receiving a Minister's Directive, approved a loan for up to \$95 million for the Thunder Bay conversion.	Structured to provide advances in tranches over a 2 year period commencing late 2005 or early 2006. Terms of each advance not to exceed 10 years. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Minister's Directive dated September 26, 2005. Loan agreement signed on November 14, 2005. In June 2006 the Government revoked its Directive to OPG on the Thunder Bay conversion project. OEFC and OPG terminated the loan agreement on September 29, 2006.
June 2005 Board meeting	OEFC Board was advised that OPG had approached OFA/OEFC to get funding indications for Niagara Tunnel Project. While the government had provided overall support for the Niagara Tunnel Project, OEFC Board advised that staff would be coming back to the board to request a loan once a directive had been obtained	
March 2005 Board meeting	Pursuant to a Minister's Directive, \$600 million in loans was approved to address OPG operating cash flow funding requirements from April 1, 2005 to March 31, 2006	Structured to provide for drawdowns in 1 or more tranches at market rates for terms ranging from 3 to 7 years. Rates determined by OEFC. In May 2005, OPG borrowed \$400 million, for a 7 year term at 5.715% (spread of 1.75% over the respective Canada bond)
	Loan approval for \$98 million to OPG for a 5 year term commencing September 22, 2005	Loan to offset interest payments on loans due that day and to be extended at market rates determined by OEFC. Subsequently, OPG declined this loan due to higher than expected revenues.
December 2004 Board meeting	Extend \$250 million March 22, 2005 debt maturity for another 5 years	Original average 5.62% borrowing cost maintained for extended loan
	Extend \$250 million September 22, 2005 debt maturity for another 5 years	Original average 5.62% borrowing cost maintained for extended loan
	Loan \$95 million to OPG for a 5 year term commencing Mar. 22, 2005	Loan to offset interest payments on loans due that day and 5.62% rate used for new loan

OPG Debt Maturity Schedule (at April 23, 2018, 2017):

Maturity Date	Coupon Rate (%)	Amount (\$ m)
Jul 22, 2018	5.497	50
Oct 22, 2018	6.325	20
Jan 22, 2019	6.178	40
Mar 22, 2019	5.651	100
Apr 22, 2019	5.635	75
Jul 22, 2019	5.184	65
Oct 22, 2019	4.857	85
Jan 22, 2020	4.618	50
Mar 22, 2020	4.679	230
Apr 22, 2020	4.954	65
Jul 22, 2020	4.658	35
Sep 22, 2020	4.391	230
Oct 22, 2020	4.094	50
Jan 22, 2021	4.573	40
Apr 22, 2021	4.633	35
Jul 22, 2021	4.152	50
Oct 22, 2021	3.985	60
Jan 22, 2022	3.583	40
Apr 22, 2022	3.521	35
Jul 22, 2022	2.981	45
Oct 22, 2022	3.163	30
Jan 22, 2023	3.27	20
Apr 22, 2023	2.961	20
Nov 22, 2026	3.037	50
Mar 22, 2041	5.397	150
Sep 22, 2041	4.74	150
Apr 22, 2042	4.356	200
Nov 22, 2046	4.028	50
Feb 22, 2047	4.122	200
Jun 22, 2047	3.648	100
Aug 22, 2047	3.858	100
Sep 22, 2047	4.066	400
Jan 22, 2048	3.874	200
Mar 22, 2048	3.997	400
Total Outstanding		3,470.0

Status of Project Financing (at April 23, 2018):

Project	Amount Authorized under Loan Agreement	Total Borrowing to Date	Expiry Date of Loan Agreement	Status of Project
Corporate Credit Facility	\$2.35 billion	\$1,400 million	Dec 31, 2018	-
Niagara Tunnel	\$1.6 billion	\$1,065 million	Dec 30, 2014	Completed
Portlands	\$400 million	\$390 million	Dec 29, 2009	Completed
Lac Seul	\$50 million	\$50 million	Dec 29, 2009	Completed
Lower Mattagami	\$700 million	-	June 30, 2016	Completed

Prepared by:
Electricity Finance Branch and Capital Market Division
April 23, 2018

From: [Ronald Kwan](#)
To: [John Kim](#)
Subject: RE: Liquidity Note
Date: Monday, April 23, 2018 2:57:44 PM
Attachments: [OPG Funding and Liquidity update April 2018-v09_Markup2.docx](#)

Hi John,

A few suggestions/comments.

Ron

From: John Kim
Sent: April-23-18 13:21
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: FW: Liquidity Note

Hi Ron,

Pls. see attached. I asked clarifying questions on the FHT part. I might be missing something but 51% of \$1.2 billion isn't what is in the bullet.

Thanks,

John

From: John Kim
Sent: Monday, April 23, 2018 11:41 AM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Esther Jeon <Esther.Jeon@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Liquidity Note

Thanks....any issue with the attached?

From: Bruno Amara
Sent: Monday, April 23, 2018 11:25 AM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Esther Jeon <Esther.Jeon@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: Liquidity Note

Hi John

Esther has drafted the attached OPG liquidity note. SIFB and Capital markets have provided their

input.

Bruno

Bruno Amara
Sr. Manager, Financial and Regulatory Analysis
Electricity Finance Branch
Corporate and Electricity Finance Division
Ontario Financing Authority

Tel: 416-325-1489

Email: bruno.amara@ofina.on.ca

OPG Funding and Liquidity Status Update
OEFC Board Meeting – April 27, 2018

Purpose

The purpose of this report is to outline the status of OPG's funding and liquidity position on an on-going basis, as directed at the December 2004 OEFC Board meeting.

Current Status

- As of February 2018, according to OPG's business plan, OPG projected a \$273 million in cash at the end of 2018.

Formatted: Font: Bold

- o As of December 31, 2017, OPG had a cash position of \$234 million.

Formatted

- In 2018, OPG expects to make dividend payments of over \$475 million to the Shareholder with respect to the sale of OPG's head office and their Lakeview site.

Formatted: Font: Bold

- In March 2018, OPG paid \$283M in net proceeds from the head office properties sale to the Province as prescribed in regulation under the *Trillium Trust Act, 2014*.

Formatted: Indent: Left: 0.75", Tab stops: 1", List tab + Not at 1.5"

- o OPG had a \$186 million cash position at the end of 2016.

- In June 2016, OEFC entered into a credit facility agreement with OPG for the latter to borrow up to \$700 million for the purpose of financing general corporate purposes effective January 1, 2017 to the end of 2017, including for the Darlington refurbishment project. The Minister's directive from June 2016 allowed OEFC to extend the term of the credit facility to the end of 2018, and increase the amount of the credit facility based on the total financing amount identified in OPG's 2016-2018 Business Plan, following concurrence by the Minister of Energy. OPG obtained concurrence for its Business Plan in November 2016

- o OPG has also received concurrence from the Ministry of Energy for its 2017-2019 Business Plan. The 2017 Business Plan projected a borrowing need of \$1,750 million in 2017 (\$1,500 million in 2016-18 Business Plan) and \$650 million total in 2018 (\$850 million in 2016-18 Business Plan) from the credit facility. This revised amount, in aggregate, is close to the approved amounts of the Minister's directive between 2017 and 2018, and the shift in the timing of about \$200 million from 2018 to 2017 is consistent with the Directive on the total financing amount.

- o In September 2017, amendments to the credit facility were finalized to increase the facility to \$2.35 billion and extend the expiry date to December 31, 2018.

- o In the 2017-2019 Business Plan, OPG ~~is expected to spend~~ \$1,249.52 million in 2017 and ~~projects to spend~~ \$1,231.43 million in 2018 on the Darlington Refurbishment project.

Commented [JK1]: Would it be OK to use the latest BP?

- o ~~In September 2017, amendments to the credit facility were finalized to increase the facility to \$2.35 billion and extend the expiry date to December 31, 2019.~~

- In 2017, OPG borrowed a total of \$800 million under the credit facility. During the first quarter of 2018, ~~they~~ borrowed an additional \$600 million. The term of all of the borrowings is 30 years.

- OPG filed its regulated rate application in May 2016 for rates starting as at January 1, 2017 and covering a period of 5 years from 2017 to 2021. The Ontario Energy Board (OEB) issued ~~their~~ decision in December 2017, and ~~their~~ decision determined that new prices would be applied with an effective date of June 1, 2017.

- o OPG recognized the impact of the OEB's decision in the fourth quarter of 2017, which resulted in a net revenue increase of approximately \$480 million related to the June 1, 2017 to December 31, 2017 period, ~~compared to the prior rates~~.

Commented [RK2]: But not compared to the 2017-19 Business Plan, was it?

- o In January 2018, OPG submitted a draft payment amounts order to the OEB that implemented the decision's findings into the final proposed regulated prices. The OEB is expected to issue the final payment amounts order in the first half of 2018, at which time OPG will begin to collect revenues based on new regulated prices. The OEB's approval of the final payment amounts order is not expected to have a material impact on the amount of net revenue recorded in the fourth quarter of 2017.

- o In January 2018, OPG ~~has~~ filed a Notice of Motion to review and vary the OEB's decision of rates being effective June 1, 2017 instead of the requested date of January 1, 2017 and an oral hearing to present their arguments occurred on April 2017. This case is ~~still~~ currently being reviewed by the OEB.

- o An amended OEB decision with respect to the Motion to Review could affect OPG's longer term liquidity outlook and net income ~~related to the January 1, 2017 to May 31, 2017 period~~.

Commented [RK3]: Makes it sound as if there would be a restatement. Is that the case?

- OPG ~~has been~~ was appointed the Financial Services Manager under the Ontario Fair Hydro Plan Act, 2017 (the Act) and, in December 2017, established the Fair Hydro Trust (the Trust) as the financing entity for the Act:

- o As reported in OPG's Q4 2017 Financial Statement, in December 2017 the Trust purchased its first tranche of financing receivable assets from the Independent Electricity System Operator in the amount of approximately \$1.2 billion. In February 2018, the Trust issued \$500 million of senior notes payable maturing in 2033.

- o On March 22, 2018, OPG purchased the second tranche of financing receivable assets from the IESO in the amount of approximately \$460 million.
- o On April 19, 2018, the Trust issued \$400 million of senior notes payable maturing in 2038.
- o On April 20, 2018, OPG purchased the third tranche of financing receivable assets from the Independent Electricity System Operator in the amount of approximately \$149 million.

• **OPG Current Financial Outlook, based upon financing updates up to December 31, 2017:** (Note – numbers are subject to rounding)

<i>Calendar Years,(\$ millions)</i>	2017 Actual	Q1-Q4 2018 Forecast	2018 Forecast
Opening Cash	186	48	234
Cash from Operations	944	524	1,468
Approved Capital Expenditures	(1,853)	(213)	(2,066)
PS Term Deposit Maturity	70	(70)	-
Pre-tax Proceeds – Sale of Head Office	484	(484)	-
Pre-tax Proceeds – Sale of Lakeview Site	-	267	267
Acquisition of Fair Hydro Trust financing receivables	(1,179)	(1,147)	(2,326)
Maturing Debt	(1,103)	705	(398)
New Debt to OEFC and Additional Corporate Debt*	1,301	(110)	1,191
Issuance of Fair Hydro Trust long-term debt	601	583	1,184
Issuance of Class A Shares**	519	503	1,022
Commercial Paper	260	(60)	200
Distributions to Non-Controlling Interest	(15)	(7)	(22)
Capital Contribution from Non-Controlling Interest	19	(19)	-
Dividends (Net Proceeds of Distribution to Trillium Trust***)	-	(482)	(482)
Net Cash flow	48	(9)	39
Ending Cash	234	39	273

* Financing from OEFC for general corporate purposes including Darlington Refurbishment project. The current credit facility allows up to \$2.35 billion to the end of 2018 consistent with 2016-2018 OPG Business Plan. As of December 31, 2017 debt to OEFC totaled to \$800M and

in Oct 2017 OPG issued \$500M of senior notes payable under a Medium Term Note Program for general corporate purposes.

** In December 2017, OPG issued non-voting Class A shares to the Province for its equity injection in the company, generating proceeds of \$519M. These proceeds were used by OPG to purchase the Fair Hydro Trust's subordinated debt in the amount of 44% of the total funding requirement for the Trust's acquisition of Investment Interest from the IESO in December 2017.

*** The Trillium Trust regulation for the head office properties was filed in March 2018, with OPG paying the net proceeds of approximately \$283M shortly after as a dividend to the Province. Note that the Trillium Trust regulation timing for the Lakeview site is likely to be in 2018. Analysis and verification of records in support of prescribed costs under the *Trillium Trust Act, 2014* needs to be undertaken.

Background

Formatted: None

The following table provides the details of deferrals of debt and interest payments, refinancing, and new loans commencing from December of 2004.

Timing	Action	Details
July 2016 Board meeting	Received Minister's Directive on June 17, 2016, for general corporate purposes including Darlington Refurbishment project up to \$700 million. Directive provides approval for subsequent loans not totalling more than \$2.3 billion but is subject to concurrence by Shareholder with OPG's business plan, and to not exceed \$3 billion in total.	Under credit facility, loans shall have a term not exceeding thirty years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread based on a survey of market rates. Interest rate and term of each loan shall be determined by OEFC. Loan agreement signed on June 17, 2016. An amendment was signed on September 6, 2017 to increase the amount of the credit facility to \$1.5 billion in 2017 and \$850 million in 2018.
December 2014 Board meeting	Subject to receiving Minister's Directive for general corporate purposes including Darlington Refurbishment project up to \$800 million.	Under the credit facility, up to 50% of advances may have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Received Minister's directive on December 18, 2014. Loan agreement was signed on December 22, 2014.
December 2013 Board meeting	Received Minister's Directive for general corporate purposes including Darlington Refurbishment project up to \$500 million.	Under the credit facility, up to 50% of advances may have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on December 20, 2013.
April 2012 Board meeting	Received Minister's Directive for refinancing of maturing debt up to \$400 million.	Under the credit facility, advances up to \$200 million may have a term up to 30 years. The remaining \$200 million may have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on April 26, 2012.
April 2011 Board meeting	Received Minister's Directive for refinancing of maturing debt up to \$375 million.	Under the credit facility, each advance will have a term up to 30 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on March 7, 2011.
September 2010 Board meeting	Received Minister's Directive for \$700 million loan to OPG for the Lower Mattagami project.	Under the credit facility each advance will have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement was signed on March 7, 2011.

Timing	Action	Details
September 2009 Board meeting	Subject to receiving Minister's directives, approved the refinancing of maturing debt up to \$970 million and an increase in the Niagara Tunnel loan to \$1.6 billion.	The refinancing debt facility will have a term of one year; each advance will have a term up to 10 years. The interest rate will be based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Received Minister's directive on January 20, 2010 for refinancing up to \$970 million of maturing debt. Loan agreement signed March 8, 2010. Received Minister's directive on April 22, 2010 for increase in the Niagara Tunnel loan to \$1.6 billion and extension of the expiry date to December 2014. Amendment signed July 21, 2010.
June 2007 Board meeting	Pursuant to a Minister's directive dated June 11, 2007, approved a loan for up to \$950 million for refinancing debt issued to OEFC and a loan for up to \$500 million for general corporate requirements.	Structured to provide advances in tranches. The ability to draw on the refinancing facility to expire on Dec 31, 2009, and the general corporate requirements facility expired on March 31, 2008 (OPG has fully drawn on this facility). Each advance shall have a term up to 10 years. The interest rate is based on the Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement for the general corporate requirements signed on June 14, 2007. Loan agreement for the refinancing maturing debt signed on July 6, 2007.
April 2006 Board meeting	Subject to receiving a Minister's directive, approved a loan for up to \$400 million for the Portlands project and a loan for up to \$50 for the Lac Seul project.	Structured to provide advances in tranches over a 3 year period. Each advance shall have a term as may be determined by the Chief Executive Officer of OEFC or his/her designate. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Minister's Directives dated October 25, 2006. Loan agreements for the Portlands and Lac Seul projects signed on December 6, 2006.
September 2005 Board meeting	Pursuant to the Minister's Directive dated August 18, 2005, approved loan for up to \$1 billion for the Niagara Tunnel project.	Structured to provide advances in tranches over a 5 year period commencing in 2005. Terms of each advance not to exceed 10 years. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Loan agreement signed on September 21, 2005.

Timing	Action	Details
September 2005 Board meeting (cont'd)	Subject to receiving a Minister's Directive, approved a loan for up to \$95 million for the Thunder Bay conversion.	Structured to provide advances in tranches over a 2 year period commencing late 2005 or early 2006. Terms of each advance not to exceed 10 years. Interest based on Government of Canada benchmark bond yield plus a spread determined by OEFC. Minister's Directive dated September 26, 2005. Loan agreement signed on November 14, 2005. In June 2006 the Government revoked its Directive to OPG on the Thunder Bay conversion project. OEFC and OPG terminated the loan agreement on September 29, 2006.
June 2005 Board meeting	OEFC Board was advised that OPG had approached OFA/OEFC to get funding indications for Niagara Tunnel Project. While the government had provided overall support for the Niagara Tunnel Project, OEFC Board advised that staff would be coming back to the board to request a loan once a directive had been obtained	
March 2005 Board meeting	Pursuant to a Minister's Directive, \$600 million in loans was approved to address OPG operating cash flow funding requirements from April 1, 2005 to March 31, 2006	Structured to provide for drawdowns in 1 or more tranches at market rates for terms ranging from 3 to 7 years. Rates determined by OEFC. In May 2005, OPG borrowed \$400 million, for a 7 year term at 5.715% (spread of 1.75% over the respective Canada bond)
	Loan approval for \$98 million to OPG for a 5 year term commencing September 22, 2005	Loan to offset interest payments on loans due that day and to be extended at market rates determined by OEFC. Subsequently, OPG declined this loan due to higher than expected revenues.
December 2004 Board meeting	Extend \$250 million March 22, 2005 debt maturity for another 5 years	Original average 5.62% borrowing cost maintained for extended loan
	Extend \$250 million September 22, 2005 debt maturity for another 5 years	Original average 5.62% borrowing cost maintained for extended loan
	Loan \$95 million to OPG for a 5 year term commencing Mar. 22, 2005	Loan to offset interest payments on loans due that day and 5.62% rate used for new loan

OPG Debt Maturity Schedule (at April 23, 2018, 2017):

Maturity Date	Coupon Rate (%)	Amount (\$ m)
Jul 22, 2018	5.497	50
Oct 22, 2018	6.325	20
Jan 22, 2019	6.178	40
Mar 22, 2019	5.651	100
Apr 22, 2019	5.635	75
Jul 22, 2019	5.184	65
Oct 22, 2019	4.857	85
Jan 22, 2020	4.618	50
Mar 22, 2020	4.679	230
Apr 22, 2020	4.954	65
Jul 22, 2020	4.658	35
Sep 22, 2020	4.391	230
Oct 22, 2020	4.094	50
Jan 22, 2021	4.573	40
Apr 22, 2021	4.633	35
Jul 22, 2021	4.152	50
Oct 22, 2021	3.985	60
Jan 22, 2022	3.583	40
Apr 22, 2022	3.521	35
Jul 22, 2022	2.981	45
Oct 22, 2022	3.163	30
Jan 22, 2023	3.27	20
Apr 22, 2023	2.961	20
Nov 22, 2026	3.037	50
Mar 22, 2041	5.397	150
Sep 22, 2041	4.74	150
Apr 22, 2042	4.356	200
Nov 22, 2046	4.028	50
Feb 22, 2047	4.122	200
Jun 22, 2047	3.648	100
Aug 22, 2047	3.858	100
Sep 22, 2047	4.066	400
Jan 22, 2048	3.874	200
Mar 22, 2048	3.997	400
Total Outstanding		3,470.0

Status of Project Financing (at April 23, 2018):

Project	Amount Authorized under Loan Agreement	Total Borrowing to Date	Expiry Date of Loan Agreement	Status of Project
Corporate Credit Facility	\$2.35 billion	\$1,400 million	Dec 31, 2018	-
Niagara Tunnel	\$1.6 billion	\$1,065 million	Dec 30, 2014	Completed
Portlands	\$400 million	\$390 million	Dec 29, 2009	Completed
Lac Seul	\$50 million	\$50 million	Dec 29, 2009	Completed
Lower Mattagami	\$700 million	-	June 30, 2016	Completed

Prepared by:
Electricity Finance Branch and Capital Market Division
April 23, 2018

From: [Whitfield, Tobias P. \(MOF\)](#)
To: [Hill, Krista \(khill@torys.com\)](#); ["STEPHEN.ASHBOURNE@blakes.com"](#); ["LEE John -TREASURY"](#); ["mfeldman@torys.com"](#); [rramchandani@torys.com](#); [RYFA Ken -TREASURY](#)
Cc: [Gavin He](#); [Hosick, Sarah \(TBS\)](#); [Cengarle, John \(MOF\)](#); [John Kim](#); [Anna Strathy](#); [Malle Hanslep \(MOF\)](#); [Ronald Kwan](#); [Ken Kandeepan](#); [Scott Nelms \(ENERGY\)](#); [Mike Manning](#); [Gadi Mayman](#); [Mark Donaldson \(MOF\)](#); [Keley Katona \(ENERGY\)](#); [Tom McKinlay \(MAG\)](#); [Thouin, Alena \(ENERGY\)](#)
Subject: RE: Provincial Protection Agreement
Date: Thursday, September 14, 2017 5:00:15 PM
Attachments: [Term Sheet - Provincial Support Agreement - Sept 14.DOCX](#)

Please find attached a revised version of the Protection Agreement term sheet based on our conversation this morning.

Best
Toby

Tobias Whitfield
Counsel, Legal Services Branch
Ministry of Finance
tobias.whitfield@ontario.ca
Phone: 416-325-1456

Provincial Protections and Assurances

Indicative Term Sheet

Ontario Fair Hydro Plan Act, 2017

*This indicative term sheet (the “**Term Sheet**”) relates to transactions contemplated to be undertaken under the Ontario Fair Hydro Plan Act, 2017 (the “**Act**”) and the regulations made thereunder (the “**Regulation**”). This Term Sheet is to be held confidential. Unless otherwise specified, defined terms used herein have the meanings ascribed to them in the Act. The provincial protection and assurance arrangements contemplated in this Term Sheet will include such terms and conditions as the Minister of Energy and the Minister of Finance determine to be appropriate. This Term Sheet is not intended to create any obligations or be binding.*

Change of Law Protection Agreement:	A Change of Law Protection Agreement will be among the Obligor, a Financing Entity and an Indenture Trustee, acting for and on behalf of the Beneficiaries in accordance with a Trust Indenture.
Obligor:	The Province of Ontario, by the Minister of Energy and the Minister of Finance acting together.
Indenture Trustee:	An indenture trustee, acting for itself and on behalf of other persons entitled under an applicable Trust Indenture.
Beneficiaries:	The Indenture Trustee, acting for itself and on behalf of other persons entitled under Specified Claims.
Specified Claims:	Payment obligations of the Financing Entity that are secured under the Trust Indenture and that are approved as contemplated below under Obligor Approval.
Protection Events:	Any of the following would constitute a Protection Event: (A) (1) the Legislature repeals (and does not replace on an equivalent basis) or amends the Act or any portion thereof; (2) the Legislature enacts or amends any other statute; (3) the Lieutenant Governor in Council repeals (and does not replace on an equivalent basis) the Regulation made under the Act or any portion thereof; or (4) the Lieutenant Governor in Council, a minister of the Crown, an official of the government or a board or commission all the members of which are

Confidential – Draft for Discussion Purposes Only

	appointed by the Lieutenant Governor in Council makes or amends any “regulation” (as defined in Part III of the <i>Legislation Act, 2006</i>); (5) there is a change in the organization or structure of the IESO or Ontario’s market undertaken at the initiative of the Province or an entity controlled by the Province, in each case, that materially and adversely affects (a) the ability of the Financing Entity to receive amounts on its investment interest so that it can pay Specified Claims, or (b) the Change of Law Protection Agreement or any of the agreements under which Specified Claims arise, other than if the Indenture Trustee has confirmed in writing that the affect under such agreements is otherwise acceptable; or (B) a court of competent jurisdiction [in a final and non-appealable judgement]¹ determines that all or a portion of the Act or the Regulation is <i>ultra vires</i> or invalid in a way that materially and adversely affects the ability of the Financing Entity to receive amounts on its investment interest so that it can pay Specified Claims.
Obligation to Pay Specified Claims:	Upon the occurrence of a Protection Event, the Indenture Trustee will have the right to require the Obligor to pay the Specified Claims owing by the Financing Entity when they become due and payable (without acceleration). The exercise of such right by the Indenture Trustee in accordance with the Trust Indenture shall constitute the only remedy available under the Change of Law Protection Agreement. Under no circumstances shall the Obligor be obligated to pay or indemnify a Beneficiary for consequential, special or punitive damages, or for economic loss or loss of profits.
Subrogation:	Upon paying a Specified Claim to a Beneficiary, the Obligor as guarantor shall have rights of subrogation, including becoming entitled to all of the applicable Beneficiary’s rights and interests under and in respect of the Specified Claim, including the security interest in each related investment interest and related property of the Financing Entity.

¹ Under consideration to assess the marketability implications of this phrase.

Confidential – Draft for Discussion Purposes Only

Optional Assumption:	At any time following the occurrence of a Protection Event, the Obligor shall be entitled (but not obligated) to assume the Financing Entity's obligations in respect of Specified Claims as obligor and debtor. The Financing Entity (including through the Financial Services Manager) will ensure that Specified Claims permit such an assumption by the Obligor without any penalty or make-whole payment (or, in the case of any contract for the provision of on-going services to the Financing Entity, the satisfaction and termination of the Specified Claims without any acceleration of future fees, profits or other like amounts), or any requirement for further consent, approval or agreement.
Term:	The Change of Law Protection Agreement will continue for as long as any Specified Claim remains outstanding.
Obligor Approval:	The process by which a Specified Claim will become subject to the Change of Law Protection Agreement will be determined by the Minister of Finance and Minister of Energy in negotiation with the Financing Entity.
FIPPA:	The Change of Law Protection Agreement will acknowledge that the Obligor will be bound by the <i>Freedom of Information and Protection of Privacy Act</i> (Ontario) and that any information provided to the Obligor, or any agent or representative of the Obligor in connection with the Change of Law Protection Agreement, may be subject to disclosure in accordance with the act or as otherwise required by law.
Representations and Warranties:	To be determined by the Minister of Finance and Minister of Energy in negotiation with the Financing Entity.
Confidentiality Obligations:	To be determined based on what would be customary and appropriate for similar types of arrangements and is acceptable to the Obligor and the Financing Entity.
Governing Law:	Province of Ontario.