

From: [Ronald Kwan](#)
To: ["Anthony Martinello"](#)
Subject: Accepted: OFA : IESO - Fair Hydro funding call
Start: Friday, April 28, 2017 2:00:00 PM
End: Friday, April 28, 2017 3:00:00 PM
Location: Call-in : 416-933-8665, Conference ID: 4157721

From: [Bonnie Lemcke](#)
To: [Gadi Mayman](#)
Cc: [Ronald Kwan](#)
Subject: FW: (BN) Ontario Forms New Trust to Tap Markets for Hydro Subsidies
Date: Friday, March 03, 2017 3:10:43 PM

[You may not have seen this Bloomberg article.](#)

Ontario Forms New Trust to Tap Markets for Hydro Subsidies
2017-03-02 21:18:47.509 GMT

By Maciej Onoszko

(Bloomberg) -- Ontario Power Generation Inc. will set up a special purpose vehicle that will raise funds to help finance subsidies announced Thursday to curb soaring electricity bills in Canada's most-populous province.

Ontario's largest power generation company will manage the new entity for the province and its electricity system operator, known as IESO. The vehicle will tap bond and possibly equity markets for funding, said Chief Executive Officer Jeff Lyash. "We've got the scale to do this, we have got access to debt markets, relationships with credit rating agencies, we have the internal capabilities," Lyash said by phone on Thursday. "We're basically a service provider -- think about it like a trust."

Ontario's plan includes refinancing investments in power generation over longer periods to reduce electricity costs in the short term. The province plans to push back the cost of the so-called global adjustment, which is a charge that covers the costs the power industry has incurred as part of its multi-billion dollar investment in facilities.

It will probably take a few months to set up the trust as the province needs to create the regulatory framework for the changes, Lyash said, adding the vehicle will be run separate from the rest of OPG's business. He declined to say how much money the entity would raise.

The trust will most likely access the bond market, but it could raise equity too, Lyash said, adding final decisions haven't been made.

The immediate reduction in the global adjustment will amount to about C\$2.5 billion per year on average over the first 10 years, the province said in a presentation of its proposal on Thursday. The additional financing will add up to C\$1.4 billion a year in interest payments.

To contact the reporter on this story:

Maciej Onoszko in Toronto at monoszko@bloomberg.net

To contact the editors responsible for this story:

David Scanlan at dscanlan@bloomberg.net;

Christopher DeReza at cdereza1@bloomberg.net

Jacqueline Thorpe

From: [Gadi Mayman](#)
To: [Ronald Kwan](#)
Subject: FW: (BN) Ontario Forms New Trust to Tap Markets for Hydro Subsidies
Date: Friday, March 03, 2017 3:34:57 PM

From: Gadi Mayman
Sent: Friday, March 03, 2017 3:35 PM
To: Serge Imbrogno (ENERGY) <Serge.Imbrogno@ontario.ca>
Cc: Scott Thompson (CAB) <Scott.Thompson@ontario.ca>
Subject: FW: (BN) Ontario Forms New Trust to Tap Markets for Hydro Subsidies

Hi Serge – I’m assuming that Jeff is talking about the equity that the Province will inject into OPG, not that OPG is planning on having the Trust issue equity in the public markets, which is what the article is implying?

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Jacqueline Thorpe

From: [John Kim](#)
To: [Ronald Kwan](#)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Date: Tuesday, May 02, 2017 2:41:10 PM

Fyi, pls. note the CO inquiry.

From: John Kim
Sent: Tuesday, May 02, 2017 2:38 PM
To: James Strang (MOF) <James.Strang@ontario.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

While I don't see why we wouldn't facilitate the request, we would require Minister's authorization of some sort and staff level, we view that TB/MBC should be made aware of the request/requirement.

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Tuesday, May 02, 2017 2:34 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

CO has a question below. Is this an OFA decision, or is a TB/MBC decision needed?

From: Hindmarch-Watson, Tim (CAB)
Sent: May 2, 2017 1:58 PM
To: Strang, James (TBS)
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Thanks James.

At a few points in the OFA comments they say "The IESO has requested a backstop credit facility from the OFA." Do you know if the plan is to grant this request?

Thanks!

Tim Hindmarch-Watson
416-325-4618

From: Strang, James (TBS)
Sent: May-02-17 12:43 PM
To: Hindmarch-Watson, Tim (CAB)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Tim, just got some feedback from Ontario Financing Authority.

James

From: John Kim [<mailto:John.Kim@ofina.on.ca>]
Sent: May 2, 2017 12:39 PM
To: Strang, James (TBS)
Cc: Bruno Amara
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi James,

I sense we missed the boat and there's new information but see attached comments/edits.

John

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Monday, May 01, 2017 8:51 AM
To: Didem Proulx (MTCU) <Didem.Proulx@ontario.ca>; Helen Graham (MOF) <Helen.Graham@ontario.ca>; Paul Kaufman (MOHLTC) <Paul.Kaufman@ontario.ca>; Nick Smook (MOF) <Nick.Smook@ontario.ca>; John Kim <John.Kim@ofina.on.ca>
Cc: Felix Fung (MOF) <Felix.Fung@ontario.ca>; Chris Skubel (MGS) <Chris.Skubel@ontario.ca>; Nina Arbabzadeh (EDU) <Nina.Arbabzadeh@ontario.ca>; Patrick Laughton (MOF) <Patrick.Laughton@ontario.ca>; Hosick, Sarah (TBS) <Sarah.Hosick@ontario.ca>; Sandy Luk (MOHLTC) <Sandy.Luk@ontario.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Draft note from Cabinet Office. They're looking for feedback by EOD today (May 1).

I'm happy to coordinate any responses.

James

From: Hindmarch-Watson, Tim (CAB)
Sent: April 28, 2017 3:46 PM
To: Fung, Felix (TBS); Skubel, Chris (TBS)
Cc: Strang, James (TBS); Moore, Karen (CAB)
Subject: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Hi Felix and Chris:

As mentioned earlier in the week, please find attached the draft CBN re the rate mitigation legislation for the TBS' review (password same as previous materials). This has been prepared with no materials and should be reviewed closely. I have left comments in the margin where I am looking for specific review or confirmation of particular details. I am interested in ensuring alignment in how we are characterizing the proposal and its risks.

The note is a bit on the longer side at the moment, so suggestions to economize without losing key pieces would also be helpful.

The note is undergoing concurrent review with Energy and my management now. My ADM will likely pass this along to Cindy and Karen for concurrent review given the time crunch, but please feel to pass along

as well.

Please try to have any comments to me by EOD on Monday so I can get it to my DM and the Secretary on Tuesday.

Have a great weekend,

Tim Hindmarch-Watson

Policy Advisor

Justice, Resource and Environmental Policy

Policy and Delivery Division

Cabinet Office

416-325-4618

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From: [John Kim](#)
To: [Ronald Kwan](#)
Cc: [Deena Padamadan](#)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Date: Monday, May 01, 2017 5:16:54 PM
Attachments: [DLEG-847_ID49011_LRC_CBN- Rate Mitigation- Draft- No materials- V1.docx](#)
Importance: High

It looks like no CabSub as it indicates prepared with no materials.

From: Strang, James (TBS) [mailto:James.Strang@ontario.ca]
Sent: Monday, May 01, 2017 8:51 AM
To: Didem Proulx (MTCU) <Didem.Proulx@ontario.ca>; Helen Graham (MOF) <Helen.Graham@ontario.ca>; Paul Kaufman (MOHLTC) <Paul.Kaufman@ontario.ca>; Nick Smook (MOF) <Nick.Smook@ontario.ca>; John Kim <John.Kim@ofina.on.ca>
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**CABINET BRIEFING NOTE
AND LRC RECOMMENDATION**

Energy

DRAFT Financing Global Adjustment

Commented [HT1]: Name as in EVista- Will update as item is updated.

Cabinet (info)	TB/MBC	Cabinet	Announcement	TB/MBC	Cabinet	Introduction
Feb 15, 2017	March 1, 2017	March 1, 2017	March 2, 2017	May 9, 2017	May 10, 2017	May 11, 2017

Summary of Proposal

The proposed legislation contains a variance from Cabinet direction, which is detailed in the ministry's variance memo and within this note.

Context for Decision:

This proposal follows Cabinet direction to the Ministry of Energy to take the necessary steps to implement electricity price mitigation initiatives that would provide additional rate relief to Ontario electricity ratepayers.

The proposed legislation enables approaches to fairly allocate the costs of the Global Adjustment (GA) amongst current and future electricity rate payers, and help the most vulnerable Ontarians through enhancements to electricity support programs through tax-base funding. To fully implement the initiative, the Ministry of Energy will be seeking future approvals for regulations identified in the proposed bill, while working to maintain existing public policy objectives such as: maintaining a reliable electricity system, Ontario's commitment to reducing the impacts of climate change and commitment to achieve greenhouse gas (GHG) reduction targets.

The proposed legislation:

1. Establishes a framework to finance a portion of the GA costs in order to reduce costs for ratepayers in the near term and spread the costs of the GA more fairly across ratepayers between July 1, 2017 and April 30, 2047:
 - July 1, 2017 to April 20, 2018, reduces after-tax electricity costs for specified consumers by 25%.
 - May, 1 2018 to April 31, 2022, electricity rates will be set by Order in Council (OIC) with the intention to keep increases in line with the Consumer Price Index (CPI) (See page 17- Fiscal Pressure)
 - May 1, 2022 to April 30, 2047, electricity rates will increase at a pace that ensures recovery of the accumulated debt, interest costs and

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administrative costs, around 10% of total electricity costs. (See page 14- Future Impacts to Electricity Rates)

Commented [HT2]: TBC by Energy

- Through the bill and subsequent amendments to the *Electricity Act, 1998* and the *Ontario Energy Board Act, 1998*, expanding the powers of Ontario Power Generation (OPG), the Ontario Energy Board (OEB), and the Independent Electricity System Operator (IESO), to provide for appropriate oversight, putting in place appropriate payment, settlement and cost-recovery authorities for and through the IESO (including accommodating payments to and from any appropriate entity) to manage the deferred GA costs. (See page 19- OPG Mechanism)
2. Expands electricity support programs for the most vulnerable consumers and moves program costs from the rate base to the tax base. The bill amends the *Ontario Energy Board Act, 1998* to:
- Move the recently expanded Ontario Electricity Support Program (OESP) to the tax base, transition the program to be administered by the Crown, and to enable information exchange between the Ontario Disability Support Program to potentially allow for automatic enrolment procedures to be established;
 - Amends the Ontario Energy Board Act, 1998 to enable a broadening of the Rural or Remote Electricity Rate Protection (RRRP), including harmonizing distribution costs for customers with the highest distribution rates and moving the program to the tax base; and,
 - Amends the *Ontario Energy Board Act, 1998* to require the establishment of a government funded program to provide a delivery credit to prescribed on reserve customers.

Terms you need to know

- **Global Adjustment (GA)** – The GA accounts for the difference between generation costs (contracted and rate-regulated) and the wholesale market price, helping to recover fixed costs, including capital costs, of putting in place and operating Ontario's generation fleet, fixed generation costs, such as nuclear contracts, as well as the cost of conservation and demand management programs. The GA is instrumental in maintaining a reliable electricity system by ensuring that sufficient generating capacity is available.
- **Local Distribution Companies (LDCs)** – Local electricity utilities, responsible for distributing power from transmission lines to people's homes (e.g., Hydro Ottawa, Toronto Hydro, etc.)
- **Delivery charge** – The costs of getting electricity from generating stations to homes and businesses. Appears as one line on electricity bills, includes three components:
 - Transmission: The costs of moving electricity across high voltage lines from generating stations to the distribution system. This cost is recovered through a variable charge that is approved by the OEB.

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- Distribution: The costs of moving electricity from the transmission system to homes and businesses. Depending on the LDC, distribution costs makes up about 60% to 80% of the Delivery line. This cost is currently recovered through both a variable charge and fixed charge, approved by the OEB. Distribution rates are moving to a fully-fixed charge over next 5 years.
- Line Loss: The costs to recover electricity that is lost as heat when it is delivered over a power line.
- **Regulated Price Plan (RPP)** – Since April 2005, the Ontario Energy Board (OEB) has administered an electricity price plan that provides stable and predictable electricity pricing, encourages conservation and ensures the price consumers pay for electricity better reflects the price paid to generators. This pricing plan is known as the Regulated Price Plan (RPP). About 5 million residential consumers, small businesses and farms are eligible for the RPP.
- **Customer classification for Hydro One** – Customer service types are determined by the kind of electricity service as well as by density – how many customers there are in the area and the number of customers per kilometre of line. The more customers there are in the area, the lower the cost to serve. R1 customers are considered 'medium density' customers and R2 are considered 'low density customers.'
- **Ontario Power Generation (OPG)** – A business corporation owned by the province that owns and operates generation assets, including nuclear and hydro, and generates almost half of Ontario's electricity.
- **Ontario Energy Board (OEB)** – A Crown Agency that independently regulates Ontario's electricity and natural gas sectors in the public interest. Implements an open and transparent process to allow for stakeholders to comment on various items.
- **Independent Electricity System Operator (IESO)** – An independent corporation and agency of the Ministry of Energy that operates the electricity market in Ontario. Balances the supply of and demand for electricity in Ontario and then directs its flow across the province's transmission lines, including interties with other jurisdictions.
- **Class A Consumer** – Large commercial and large industrial consumers with average peak load size above 3 MW, subject to eligibility. Class A consumers pay GA based on their electricity consumption during the five highest peak demand hours during the year. On January 1, 2017 the threshold for Class A was lowered to 1MW for all consumer types.
- **Non-RPP Class B Consumer** – Commercial, institutional and small industrial consumers, typically with load size under 3 MW. Class B consumers pay GA as a volumetric rate applied to all electricity consumption. Class B consumers include those that choose not to become Class A.
- **Special Purpose Vehicle (SPV)** –
- **Security Interest** –

Commented [HT3]: TBS: Do you have standard language that you would recommend using?

Why does Ontario need these changes? Why now?

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Addressing rising electricity prices is among the highest priorities for Ontarians. There has been increased media attention and public pressure for the government to provide ratepayer relief. On March 2, 2017, the Ontario government announced its electricity rate mitigation package, Ontario's Fair Hydro Plan, which included the initiatives contained in the proposed legislation. The government has committed to implement further rate relief measures by the summer 2017.

What is the expected cost to government?

The total cost of the proposal is \$4.1B [TBC] in 2017/18, \$1,599M funded through the fiscal plan and \$2.5B to be funded through the electricity rate base.

Commented [HT4]: TBC as this includes the equity injection.

TABLE 1: Cost Impact (\$M)	2017-18	2018-19	2019-20	2020-21
Moving Social Programs to Government-Funded (details provided in the chart below)	499	753	829	892
GA Financing	2,534	2,668	2,942	3,420
OPG Loan / Share Purchase (i.e. equity injection)	1,100	?	?	?
Cumulative Total	4,133	3,421	3,771	4,312

Commented [HT5]: TBC

The proposed bill identifies OPG as the Financial Services Manager and would therefore take on the risk and responsibility of financing the deferral by purchasing monthly regulatory assets from the IESO. The OPG would finance these purchases through a combination of an equity investment by the Province (\$1.1 B in 2017-18; See Table 1) and external private sector financing. The structure has been designed to increase gross debt of the Province (to finance the equity injection in OPG), increase interest on debt related to that external debt, increase net investment in OPG, and increase earnings of OPG. The equity investment has been structured so that the underlying regulatory asset will offset the additional debt to not impact the province's net debt.

The estimate for the combined impact of the non-Global Adjustment initiatives that would begin in 2017/18 is expected to be \$499M in 2017/18, growing to \$753M in 2018/19 and rising. This represents an additional pressure on the plan. These estimates are based on variable inputs such as program uptake and future energy consumption of various consumer groups, and are therefore subject to change.

TABLE 2: Fiscal Impact (\$M)	17-18	18-19	19-20	20-21
RRRP Enhancements*	344	472	484	497
OESP Enhancements	140	261	325	375
First Nations On-Reserve Delivery Credit	15	20	20	20
Total	499**	753	829	892

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***Note:** Current regulatory framework calls for RRRP to increase by average distribution rate increase. Forecast assumes 2.6% annually though is subject to OEB proceedings. Fiscal projection is subject to consumer consumption patterns that may change due to extreme weather or other factors. Does not include Algoma Power or Hydro One Remotes, which would continue to be on the rate base.

****Note:** Value adjusted from \$665 million to reflect July 2017 implementation.

There is inherent risk in the financial estimates because the calculations are highly dependent on forecasts of the total consumption and bills of customers eligible for the RPP, the cost of borrowing, electricity demand and electricity market conditions and accounting assumptions. In addition, under the proposal, electricity prices would increase around 10% above forecast residential monthly bills from 2028 to 2047. The public may expect that the government is committed to reducing or holding constant the absolute cost of electricity for consumers in the longer term. Under the proposal, the government would not have the ability to direct further changes to the rate of repayment for GA refinancing, which would limit the government's options to address electricity rate concerns in the future. (See page 17- Fiscal Pressure)

What are the key steps to deliver this proposal?

- May 11, 2017 - introduce legislation.
- Spring- Summer 2017- Energy to work with IESO, OEB, OPG, and LDCs on the implementation of the Fair Hydro Plan.
- Information postings of proposed regulations.
- June ?? 2017- Energy to bring regulations to TB/MBC.
- June ??, 2017- Energy to bring regulations to LRC/Cabinet.
- July 1st, 2017- the remaining Fair Hydro Plan reductions and programs would take effect. Programs that are not established on this day for technical implementation issues will have benefits that are retroactively applied to customers once program is operational in individual LDCs.

Commented [HT6]: Energy: Please refine

How will the changes be communicated?

On March 2, 2017, the Premier made a high profile announcement of additional relief to reduce electricity costs for Ontarians. Coinciding with this event, there was news releases with backgrounders, a technical briefing of the media, a public education campaign to raise awareness of the rebates and initiatives in place to reduce electricity bills, and an Ontario website that includes all the programs and initiatives that the government is undertaking to reduce electricity costs.

Building on the previous announcements, on May 11, 2017, the Premier is to make a high profile announcement of the plans to introduce the necessary legislation to implement Ontario's Fair Hydro Plan to provide additional relief to reduce electricity costs for Ontarians.

Given the risk identified that the GA financing may have a fiscal impact, communication will need to be clear that the proposed draft legislation meets the legal, accounting and financial requirements to not have a fiscal impact.

Commented [HT7]: CO and Energy Comms to review.

Notes and Recommendation from LRC

LRC item direct to Cabinet.

Cabinet Office Analysis

The proposed legislation allows for the implementation of the main elements of Ontario's Fair Hydro Plan announced March 2 to provide further rate relief to Ontario electricity ratepayers. The Global Adjustment (GA) smoothing proposal will provide 25% in rate relief in aggregate (including the 8% announced in 2016) for eligible consumers of the Regulated Price Plan (RPP) between July 1, 2017 and April 31, 2018 ("The Fair Adjustment"). Electricity rates would then change by amounts prescribed in the regulations under the bill, with the intention to keep rate increases in line with Consumer Price Index (CPI) between May 1, 2018 and April 30, 2022.

Commented [HT8]: Need to add estimate of benefits from the other programs, particularly RRRP as I think the impact, along with GA, is going to be closer to 40 or 50% for some customers

Ontario produces and publishes a Long-Term Energy Plan (LTEP) every three to four years, with the next LTEP scheduled for release in the summer of 2017. LTEP principles that will guide decision-making are affordability, reliability, clean energy, community and Indigenous engagement, and conservation. Through extensive consultation with the public, stakeholders and Indigenous partners through the fall of 2016, the Ministry has identified key priorities, and, Ontario's Fair Hydro Plan combined with new policy or program announcements in the LTEP, will provide the comprehensive future planning perspective for Ontario's energy sector.

Commented [HT9]: Confirm with PO and Energy

1. Refinancing the Global Adjustment

The proposed legislation establishes the framework to defer some of the current GA costs to future ratepayers by recognizing the longer term benefit of these assets to the electricity system (similar to extending and re-financing a mortgage). The methodology is based on the assumption that some generation assets are expected to continue to provide benefit to future ratepayers beyond the term of current contracts, and that future ratepayers are expected to continue to be able to utilize and benefit from these assets, and that they will also reduce the need to finance the development of new generation assets in the future.

Many of the contracted generation assets are expected to have useful lives that extend beyond the term of their current financial contracts (typically 20 years). Similarly, conservation costs are recovered through the GA on an annual basis while conservation initiatives can provide benefits to the electricity system over many years.

According to a legal opinion by former Supreme Court Justice Binnie, the amount that could be financed would need to reflect the true value of the underlying assets being amortized over a longer period of time. Shifting too much of the current GA costs to future generations leaves the process more susceptible to constitutional challenge and could jeopardize the nature of the clean energy adjustment being a regulatory charge, and risk it being deemed an unlawful tax. The bill has been drafted to mitigate this risk and clearly articulates the desire to fairly attribute intergenerational costs and benefits. In addition the

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bill includes provisions to allow for the balance of the legislation to remain in effect if any particular clause or section is struck down by a court. (See page 16- Legal Risk)

Key elements of this component of the bill include:

Fair Adjustment

- July 1, 2017- April 30, 2018- the bill outlines an immediate 25% reduction in rates for eligible consumers in recognition of the investment in clean energy initiatives since 2005.
- May 1, 2018- April 30, 2022- the bill allows for rates to be set by regulation, with the intention that rates will increase in line with CPI over this time, consistent with government commitments. (See page 17- Fiscal Pressure)
- Ontario Energy Board (OEB) would calculate appropriate adjustments for “specified consumers”.

Clean Energy Adjustment

- Determined by Ontario Power Generation (OPG) as the Financial Services Manager, the clean energy adjustment is the amount that will be recovered from consumers in the future to pay principle, interest, transaction costs and administrative costs associated with the fair adjustment (regulatory/investment asset).
- Will be subject to true-up process that will reconcile actual amounts collected with expected amounts.
- May 1, 2022- April 30, 2047- to be invoiced to consumers and collected as part of the electricity bills through existing Independent Electricity System Operator (IESO) and Local Distribution Companies (LDC) processes.
- In accordance with the regulations, the OEB to set the rate at which “specified consumers” are invoiced to recover the clean energy adjustment.

Fair Allocation Amount

- The fair allocation amount is calculated by the Financial Services Manager consistent with the principles of the bill.
- Established for the purposes of allocating the costs of the clean energy initiative to provide inter-generational fairness to rate payers; and aligning funding obligations that may be incurred during each reference period (typically every 6 months).
- Provided to the Minister of Energy who will ensure that the information is made public in an appropriate way.
- Principles established in the bill require proper match over time between the costs of providing facilities for clean electricity generation and conservation and the consumers who benefit from these investments in the system. (Page 16- Legal Risk; See page 17- Fiscal Pressure)

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Financing Plan

- Prepared by the Financial Services Manager to determine if potential funding obligations should be incurred to acquire an investment interest in accordance with the bill.
- Provided to the Minister Energy who may remove the Financial Services Manager if the Financing Plan is not consistent with the principles of the bill and the Financial Services Manager has been given the opportunity to address the Minister's concerns.
- May be amended as determined by the Financial Services Manager.
- In practical terms, the Financing Plan is intended to show how debt (with varying degrees of incurrence dates, maturities, interest rates) will be used over time.
- The OEB would review the administrative costs of the Financial Services Manager.

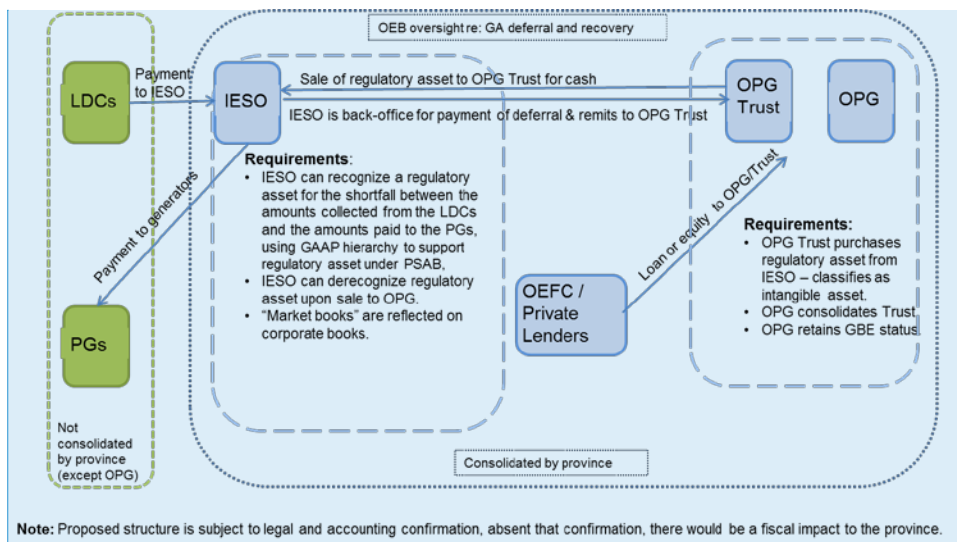
Regulatory Asset and Investment Asset

- Regulatory Asset created as IESO incurs a funding shortfall equal to the difference between the rates it receives after the implementation of the Fair Adjustment and the amounts owed under generation and conservation contracts (i.e. the comparison rate minus rates after fair adjustment).
- Subject to OEB approval, IESO would record the funding shortfall as a regulatory asset. IESO would also have collection rights to recover the funding shortfall, which may be sold. Collection rights are deferred until May 1, 2022.
- The Financing Plan contemplates the Financial Services Manager establishing financing entities (OPG Trust/Special Purpose Vehicle (SPV)) to buy the regulatory asset and the associated rights in exchange for a payment to the IESO. IESO would use the payment to offset the funding shortfall.
- This purchase and sale turns the regulatory asset into an investment asset. The transfer includes the rights to collect amounts related to the clean energy adjustment in a manner consistent with the bill.
- The investment interest owner may further sell all or a portion of its rights and interests including by dividend or undivided interest, consistent with the Financing Plan. An investment interest owner may also grant a security interest over all or a portion of its right, title and interests to secure a funding obligation.
- After 5 years (May 1, 2022) the IESO has the rights to collect its funding shortfall from ratepayers in the event that a portion of the regulatory asset is not bought and sold. (See page 17- Fiscal Pressure)
- The rights associated with the investment asset require IESO and LDCs to collect money from rate payers as agent of the investment asset owner.

Crown Undertaking (Guarantee or Backstop)

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- The Crown would undertake not to do anything to adversely affect an investment asset or funding obligation, including hinder, impair, prejudice the charging, collection or remittance of the clean energy adjustment.
- The Minister of Energy, with LGIC approval, may enter into agreements for compensation with any person in respect of the bill.
- The Minister of Finance, with LGIC approval, may agree to guarantee and indemnify any debts, obligations, securities or undertakings associated with the investment interest.



Commented [HT10]: Energy: Please provide updated chart with terminology from the legislation embedded.

The bill establishes a structure in which the IESO records the GA cost recovery deferral is recorded as a regulatory asset (regulated by the OEB), supported at its foundation by the fact that the refinancing of the GA is not a reduction in the GA, but rather a deferral to be collected at a future time ("The Fair Adjustment"). Eligible consumers would receive a 25% reduction in electricity rates from July 1, 2017 to April 30, 2018. The IESO may then sell the regulatory asset, at which time it becomes an investment asset. The investment asset owner (OPG Trust/SPV or trust "financing entities") may then further sell or securitize all or part of the regulatory asset to other parties in exchange for a funding obligation.

Under the proposed framework, OPG, acting in its role as the "Financial Services Manager", and following the principles in the bill, would regularly calculate the "Fair Allocation Amount" to ensure a proper match of the allocation of the intergenerational costs and benefits. To recoup the costs associated with the fair adjustment, consumers, starting in May 2022 would be invoiced the "Clean Energy Adjustment" on their electricity

Commented [HT11]: Section to be compared against the legislation's compendium when available.

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bills through existing IESO and LDC processes. The OEB would set the rates at which the clean energy adjustment could be collected.

OPG is planning to create a SPV or Trust to finance the GA. The SPV/Trust will be consolidated by OPG, giving OPG the appropriate powers to impact its exposure to variability of the income in the SPV/Trust. The variability will likely largely result from the financing of the SPV/Trust, and therefore OPG will have the ability to direct the financing of the Trust and both benefit from its financing strategy and be at risk as a result of it.

OPG Trust/SPV will ultimately take on the risk and responsibility of financing the deferral through debt financed from OPG and external sources. OPG's debt would be funded through a combination of an equity investment by the Province (See Table 1 on page 4) and external financing through a securitization of the investment asset. The structure would result in increased gross debt of the Province (to finance the equity injection in OPG), increased interest on debt related to that Provincial debt, increased net investment in OPG (to offset the Provincial borrowing for no net debt impact), and increased earnings of OPG. The proposed structure is expected to result in: (1) increase in provincial gross debt offset by an equivalent in regulatory assets resulting in no change in net debt, and (2) an increase in interest on debt paid by the province offset by higher earnings from OPG resulting in no impact on annual deficit of the province.

The legislation commits the government to backstop the financing if the government were to ever hinder the collection of the clean energy adjustment including revoking or changing the legislation or regulations. In other words, the OPG and its debt holders would have their capital guaranteed and paid for directly by the Province if such a situation were to occur. The potential cost to government associated with providing this type of guarantee and the cost of borrowing from private lenders is unknown at this time, but could be as high as \$1-1.5B annually [TBC]. It should be noted that the external borrowing by the OPG Trust will be at a higher interest cost than Provincial borrowing costs, which would affect the carrying costs that would need to be recovered from ratepayers in the future.

Commented [HT12]: Based on commentary from implementation meetings. Don't believe this includes estimates of private lender borrowing costs. Please advise

The proposed structure has been extensively reviewed by KPMG (Energy advisor and IESO auditor), and the firm has provided an accounting opinion confirming the validity of the structure under PSAB [TBC]. This opinion can be made public [TBC] to support the governments rational for the plan. In addition, MAG and Blakes are confident that the structure is constitutionally sound, but that this will depend on the size of the GA deferral attempted. MAG is confident that the initial fair adjustment is achievable and justifiable, but that this risk increases in the proceeding four years, and may impact the ability to fulfill the commitment to keep increase in line with CPI by this mechanism. Based on the current analysis there is a moderately high risk that the GA financing will have a fiscal impact on the Province before 2022.

Commented [HT13]: Energy to confirm

For clarity: the following structural requirements have been met: [TBC]

Commented [HT14]: TBC based on receipt of professional opinions etc.

- IESO requirements :

- IESO can recognize a regulatory asset for the shortfall between the amounts collected from the LDCs and the amounts paid to the PGs using GAAP hierarchy to support regulatory asset under PSAB;
- IESO can derecognize regulatory asset upon sale to OPG;

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- "Market books" are reflected on corporate books; and,
- OEB to act as regulator.
- OPG requirements:
 - OPG Trust/SPV purchases regulatory asset from IESO – classifies as intangible asset;
 - OPG consolidates Trust/SPV; and
 - OPG retains GBE status.

However, despite the fact that the structure has satisfied the legal, fiscal, and accounting requirements outlined in the policy submission, there remain some fundamental risks that the province would need to accept:

- The structure is unique in Canada and possibly the world, which increases the risk or unknown factors impacting its performance. The use of securities mechanisms to address debt is more common in the United States, but officials are currently unaware of any example that would compare to the size, complexity, or fluidity of what is proposed;
- Complexity of the structure and length of deferral/recovery increases risk and decrease transparency;
- Government would have no ability to control electricity prices resulting from these changes outside of recourse to the fiscal plan;
- Government would not know the price of private borrowing that would be required for the OPG Trust to work and will have limited control over OPG's direct operations as the Financial Services Manager. While removal of the Financial Services Manager is provided for in the bill, in practice this may prove problematic once the system is operational; and
- Private lenders and rating agencies may disagree with the assessment of the size of the Fair Allocation Amount which would increase the risk of the asset and therefore its saleability. Could decrease amount of rate reduction achievable under this mechanism.

2. Enhancing electricity supports for vulnerable Ontarians and shifting costs from rate payer funded to government funded:

Moving the Ontario Electricity Support Program (OESP) to the tax base:

The OESP is an income-tested, application based program that lowers electricity costs of the most vulnerable consumers by providing a rebate directly on electricity bills. The program was launched in January 2016 and has had roughly 30% enrolment. Consistent with Cabinet direction, the program was recently expanded to increase the existing benefit scales by 50% and provide additional credits to more households.

Under the expanded program the basic OESP benefit scale increased from \$30-\$50 to \$45-\$75 a month and the enhanced OESP benefit scale would increase from \$45-\$75 to \$68-\$113 a month for eligible consumers.

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The proposed bill amends the *Ontario Energy Board Act, 1998* to allow for the program to transition from the rate base to the tax base, and become administered by a Ministry or other entity as may be prescribed. The cost to the fiscal plan would be \$186M in 2017/18. The bill provides further amendments designed to allow information sharing between the Ontario Disability Support Program (ODSP) and the entity responsible for OESP. The intention is that this information sharing will allow for the automatic enrolment of individuals that are already enrolled under the ODSP, but it is currently unknown to what extent this will significantly impact the enrolment under the program.

RRRP Enhancement (Delivery Charge Relief):

Currently, RRRP is a \$241.9M program paid for by the ratepayers. For an average residential customer, the cost of supporting RRRP is roughly \$1.58 per month. For other customers, the cost to support the RRRP can range from \$65 for a greenhouse to \$8,000 for a medium industrial. RRRP helps to offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province, including Hydro One R2 customers. The delivery charge includes a distribution cost, which can vary across LDCs, and distribution costs are highest for Hydro One R2 and R1 (medium density) customers.

There are also some LDCs with relatively high distribution costs that, when coupled with high consumption patterns, can result in very high bills for consumers (Northern Ontario Wires, Lakeland Parry Sound, Chapleau, Sioux Lookout, InnPower, Atikokan and Algoma).

In 2016 the OEB made a ruling that all LDCs need to move to fixed distribution charges. The OEB found that fixed distribution charges would establish a fairer way to recover the costs of providing distribution service, and provides greater revenue stability for distributors, which will position them for technological change in the sector, remove any disincentive to promote conservation, and help with their investment planning.

The proposed bill amends the *Ontario Energy Board Act, 1998* to require the creation of a distribution rate protection program and the ability to cap the distribution charges of prescribed distributors. The amendments also establish that this program will be funded by the tax base.

The intention is to draft regulations permitted under this section of the bill to Harmonize the fixed distribution rates to the lowest distribution cost of the LDCs mentioned above at \$38/month (which is the forecast rate for Northern Ontario Wires). If the costs of another LDC moved above these in the future, a regulation change would be required to for that LDC to receive RRRP. These enhancements are expected to benefit approximately 800,000 customers in Ontario.

Targeted RRRP consumers would see additional savings on their monthly bill that would vary based on their consumption level and cost to fiscal plan would be \$344M in 2017/18, \$243M of which is a transfer of existing programs to the tax base. If the legislation and required regulations are passed, the program would become active as of July 1, 2017. It is possible that for technical reasons not all LDCs will be able to

Commented [HT15]: ENERGY: do you have any numbers on this point? Were other programs considered other than ODSP? Can we put something in about continuing efforts to improve the enrolment?

Commented [HT16]: Need new estimate of transferred program cost starting from July 1.

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implement the changes required under the program in time for the July 1 effective date. In these cases, the bill dictates that, once the changes have been made (required by October 1, 2017 at the latest), the LDC would provide a lump sum credit to customers that would otherwise have been eligible for benefits under the program starting July 1st.

On-reserve First Nations Delivery Credit

First Nation and Political-Territorial Organization leaders have advocated for the need for electricity rate relief for on-reserve customers and the review of delivery charges associated with transmission and distribution within the context of historical grievances. In this instance, historic grievances relate to lands affected by energy developments.

The proposed bill amends the *Ontario Energy Board Act, 1998* to require the creation of a tax base funded delivery credit program for on-reserve customers with the details as prescribed in the regulations. The intention is to enact regulations that would eliminate the delivery charge for all on-reserve First Nation household customers and eliminate the monthly service charge for customers of licensed distributors which charge a bundled rate.

Eligible recipients would be automatically enrolled in the program (~21,500 customers) and receive an average monthly benefit of \$85. The program will cost approximately \$20M annually and, provided the legislation and regulations are passed, would become effective July 1, 2017. It is possible that for technical reasons not all LDCs will be able to implement the changes required under the program in time for the July 1 effective date. In these cases, the bill dictates that, once the changes have been made (required by October 1, 2017 at the latest), the LDC would provide a lump sum credit to customers that would otherwise have been eligible for benefits under the program starting July 1st.

Expected Impacts of the Proposal on Electricity bills:

The impact of proposed legislation to an eligible customer's bill in July 2017 is a 25% decrease (combined with the 8% from ORECA effective Jan. 1, 2017), followed by an increase in price over time. This includes the 8% rebate that came into effect on January 1, 2017. Between May 2018 and April 2022 electricity rates will be set by regulation with the intention that rate increases would be kept in line with CPI. Customers that are eligible for the RRRP enhancements and the OESP will see further reductions in their electricity rates beyond the 25%

Commented [HT17]: ENERGY: Can you provide analysis on the impact for customers that will receive the RRRP etc?

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Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	158	164	167	170	181	178
Total Bill (excludes HST)	140	145	148	150	160	158
Impact of GA Financing		-26	-26	-26	-32	-28
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		117	120	122	125	127
8% rebate		-9	-10	-10	-10	-10
HST		15	16	16	16	17
Revised Bill (includes HST)	158	123	126	128	131	133
Year-over-Year Change		-22%	2%	2%	2%	2%
Change from Forecast		-25%	-25%	-25%	-28%	-25%
Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	162	157	159	170	166
Year-over-Year Change		1%	-3%	1%	7%	-2%
Change from Forecast		-2%	-2%	-2%	-2%	-2%
Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	88	90	84	92	93
Year-over-Year Change		-2%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-4%	-4%	-4%

Notes: Based on IESO's revised OPO forecast as of February 2017. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing.

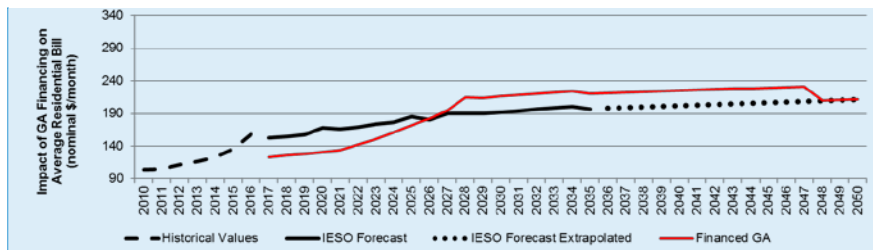
Risks and Considerations:

Future Impacts to Electricity Rates

Borrowing money to defer GA costs for ratepayers would lower costs in the short term but result in substantial debt and higher electricity prices in the future. Based on the GA deferral portion of the plan, electricity prices would increase to about 10% above the actual cost of electricity over the recovery period (peaking at 13%). The proposal may create the expectation that the government is committed to reducing or holding constant the absolute cost of electricity for consumers. Under the proposal, the government would not have the ability to control this portion of electricity rates in the future outside of recourse to the fiscal plan.

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Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 such that the average monthly residential electricity bill increases by 6.5% per year with a limit of \$2.2 billion above the true cost of GA in any given year to cap repayment charges at a maximum of 13% of total bill. IESO forecast is based on IESO's revised OPO forecast as of February 2017. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

Commented [HT19]: ENERGY to confirm if this needs to be updated.

The government may be criticized for creating a new debt structure which could be compared to the previous debt retirement charge (DRC). The previous debt retirement charge was removed from residential bills in January 2016 and is scheduled to be removed for remaining customers in April 2018.

Future repayment cost estimates are based on a static interest rate of 5%, and forecast electricity market conditions and demand levels. Declining demand levels due to conservation, technology adoption, and self-generation would increase the costs borne by remaining customers to decrease the debt associated with GA financing. This would increase the risk that the province would have to absorb some of the debt in the future. To mitigate against the risk that increased self-generation poses, the bill provides that the Clean Energy Adjustment may not be "set-off". In other words, it would exist as a separate and distinct component of the bill that could not be reduced by methods such as net-metering.

Not all generating assets will continue operations at the end of their contract. If the Fair Allocation Amount is not properly designed, future rate payers will be paying the cost for assets that are no longer in use, which would be unconstitutional (See page 16- Legal Risk). High capital costs, equipment obsolescence or surplus capacity / low demand conditions mean that some generators will shut down at the end of their contract. Future ratepayers would be paying for these assets that no longer produce power in paying down the deferred GA and accumulated interest costs.

Accounting and Provincial Credit Rating and Borrowing

The significant amount of additional provincial borrowing needed to refinance the GA and associated risks and fiscal costs (interest rates, repayment timelines) could put pressure on the Province's credit rating and overall borrowing capacity.

The complexity of the structure and length of deferral (i.e., recovery of debt) increase the overall risk of the proposal and decrease transparency to the public. The structure of the GA deferral was designed to result in an (1) increase in provincial borrowing (2) no increase in net debt, and (3) no impact on annual surplus/deficit. However, depending on

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funding to OPG/ OPG Trust from the Province, an increase in interest on debt and an increase on income from OPG will result. The structure is also contingent on the size of the GA deferral that is seen as possible, which, as previously mentioned, increases the likelihood of pressures on the fiscal plan in the near future. (See page 17- Fiscal Pressure)

Rating agencies and investors in the Province's debt may view all of the borrowing (whether by the Province directly or the OPG Trust) as an obligation of the Province. Depending on the magnitude of the debt incurred, the Province's borrowing cost may be impacted.

The Ontario Auditor General (OAG) has been briefed on the proposal and has had access to the March 1, 2017 policy submission for the Fair Hydro Plan. While the auditors of OPG and IESO have provided their assessments and the Office of the Provincial Controller Division (OPCD) has been engaged, the OAG has historically raised concern with "rate regulated accounting" and may take this into account when the provincial books are audited (i.e., it may impact whether the OAG qualifies the provincial books).

Based on early assessments, only a maximum of 18% rate relief **TBC** can be justified by amortizing contracts over the useful life of the underlying assets. Reducing electricity rates up to or beyond this amount is dependent on increased borrowing. All of the deferral is dependent on increased borrowing. The 18% referenced here is the limit based on review of the contracts and a Eurig assessment and also includes the 8% reduction that was already provided.

Commented [HT20]: To be updated when Navigant prelim report and OPG analysis complete

Legal Risk – constitutionality of financing the GA

The current GA amount paid by consumers is a regulatory charge. One of the requirements of a valid regulatory charge (as opposed to a tax) is that the person paying the charge either benefits from the regulatory scheme or causes the need for regulation. In principle, refinancing the GA to spread the costs of generation and conservation assets over the useful life of the assets presents only a low risk of being a tax, as each cohort of consumers pays for a proportion of the GA cost roughly equal to the proportion of the benefit they receive from the useful life of the assets.

Former Supreme Court Justice Binnie has provided legal analysis of this proposal, stating that the amount that could be financed would need to reflect the true value of the underlying assets being amortized over a longer period of time. Shifting too much of the current GA costs to future generations could jeopardize the nature of this being a regulatory charge.

A proposal for refinancing the GA that appears to cross-subsidize near-term consumers at the expense of long-term consumers by back-loading costs more than if costs were spread equally over the estimated lifespan of generation and conservation assets presents a moderately high risk (more likely than not) of constituting a tax. If the government fails to establish that the relevant electricity generating assets will continue to perform economically over the 30 year period, or if the GA charge is in the opinion of the Court disproportionately backend loaded, the GA will not qualify as a regulatory charge

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(and would be characterized as a tax). Were the charge characterized as a tax, in the event of a challenge, it would be struck down by a court as unconstitutional and consumers would be entitled to recover their payments. This risk could be eliminated, either up front or retroactively, by the imposition of a valid tax.

The degree of constitutional risk is in direct proportion to the extent the government is not able to show a proper match between the cost of providing facilities for electricity generation and the group of consumers who benefit year to year from electricity generated by those facilities. By shifting costs to the 20-30 year customers, the government may in reality be disproportionately back-end loading the GA with the effect that the 20-30 year consumers will be subsidizing the 1-20 year consumers. In short, the bigger the reduction in charges to current consumers, the greater the constitutional risk.

The bill has been drafted to mitigate the constitutional risk of the proposal and clearly articulates the desire to balance the costs and benefits of assets across generations. The bill includes provisions to allow for the balance of the legislation to remain in effect if any particular clause or section is struck down by a court. In addition, external consultant Navigant has provided an interim report on the costs and benefits of the long lived assets which supports the previous conclusions regarding the size of the GA deferral that would be supportable. This is further supported by the conclusions of OPG's independent analysis of the question.

MAG and Blakes are confident that the structure is constitutionally sound, but, as identified above, that this will highly depend on the size of the GA deferral attempted. MAG is confident that the initial fair adjustment is achievable and justifiable, but that this risk increases in the proceeding four years, and may impact the ability to fulfill the commitment to keep increase in line with CPI by this mechanism.

In addition, the structure of the GA refinancing means that the infrastructure included as part of the clean energy adjustment (i.e. amortized over 30 instead of 20 years) will need to be in service over the entire 30 year amortization period or provide benefits to the system in some way over the whole period. In practice this may mean that the government will have limited ability to alter the generation mixture included under the clean energy adjustment, including natural gas generation facilities, which may at some point be seen as inconsistent with the province's commitments to reduce greenhouse gasses. This risk has been mitigated in the bill, by allowing for prescribed natural gas generation contracts to be excluded from the clean energy benefit calculation.

Fiscal Pressure

This proposal aligns with the 2017 Budget fiscal plan, but involves significant ongoing risks. The proposal does not include a scheduled review period or an end date, resulting in an ongoing fiscal pressure, which may increase in the out years, and could only be removed by a legislative amendment.

The cost projections in this proposal are highly sensitive to interest rates and other assumptions:

Commented [HT21]: TBC

Commented [HT22]: ENERGY please confirm. Need to clearly articulate any differences that may exist between these analyses

Commented [HT23]: Needs ground truthing

Commented [HT24]: TBS please review closely

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- The proposal assumes GA refinancing does not have a fiscal impact because the associated legal authority and accounting treatment requirements are met. If the costs of GA refinancing were accounted for as an expense to the fiscal plan, the fiscal impact would be significant.
- The term and timing of the GA refinancing are highly dependent on the IESO's forecast of GA costs and actual interest rates.

The extent of fiscal pressures is also dependent on other factors (i.e., OAG could qualify Ontario's books or issue an adverse opinion). Due to the complexity and size of the proposal, the government has commissioned external opinions on the legal, fiscal, and accounting requirements. Energy's advisor and IESO auditor, KPMG, has provided an accounting opinion that the principles of the structure are sound, and this opinion can be released publicly when desired. This opinion may not change the likelihood of a contrary opinion by the OAG, but does provide a tool for government to point to in justifying its decisions.

Commented [HT25]: TBC

There is also a risk that credit rating agencies and the market may take an alternate view as to the size of the GA deferral that is possible before becoming unconstitutional. If the Fair Adjustment exceeds this analysis, it may increase the perceived risk of the investment asset and therefore its saleability, which would result in reduced market uptake and reduce the amount of near term rate reduction that would be achievable under the plan. This is why the increases in electricity rates between May 2018 and April 2022 are to be set by regulation as opposed to legislating that they increase by CPI. It may not be possible to legally hold the rate reductions to increase by CPI, and if the government wanted to hold to this commitment, the difference would need to come out of the fiscal plan, which has not been forecasted. Each percentage point of reduction that the structure cannot provide would result in an approximate \$150M [TBC] cost to the tax base. This has not been provided for in the bill, but it is likely that the government will receive questioning along these lines and why the previously committed CPI increases are not explicitly stated in the bill.

Commented [HT26]: Needs ground truthing

There may be also some criticism that additional fiscal pressure and risk is being taken to benefit some customers that are not in as much need of rate relief as others (i.e., those that own second homes or cottages).

Legislative Officers

The Ontario Auditor General (OAG) has expressed views on rate regulated accounting, which will likely be raised again upon the announcement of this suite of initiatives. The OAG was provided copies of the Cabinet Submission seeking policy approval for Ontario's Fair Hydro Plan and has been briefed by officials from the Ministry of Energy. The OAG will have opportunities to publicly state her views through the Public Accounts committee in the summer of 2018 and in her pre-election report.

Commented [HT27]: Energy to update.

The Financial Accountability Officer (FAO) has not been consulted on this proposal and is expected to have an opinion on how this proposal may impact the state of the province's finances.

Commented [HT28]: Energy to update from discussion with FAO

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OPG Mechanism

- Accountability
 - o Bill attempts to balance the independence of the OPG trust with regulatory oversight and the market's need for certainty in recovering the GA financing that it provides.
 - o Accountability to the government or the public, amount of government control of the entity, including future rate increases.
- New structure
 - o Structure is complex, involving:
 - IESO as originator of the regulated asset and responsible for flow of funds;
 - OEB as regulator of the new mechanism;
 - OPG responsible for financing and managing the mechanism; and
 - The Province providing ongoing equity capital infusions to OPG and backstop.
 - o Addition of financial agency to current operational obligations of OPG – not the current expertise of OPG. However, OPG has experience managing large financial assets and liabilities through the jointly managed Ontario Nuclear Funds as well as its own pension fund. In addition, could possibly dilute OPG's focus on current high priority responsibilities (i.e., electricity generation and nuclear refurbishment).
 - o This financing structure would be unique to Canada – uniqueness reduces likelihood of all risks being known/mitigated. Highly specialized expertise would be required.
 - o Connection to BPS compensation framework/lack of national comparator.
 - o Unknown transaction, admin, consultant costs. OEB would review OPG's cost as the Financial Services Manager
- Debt
 - o Opportunity for significant shifting of the Ontario's electricity sector over the lifespan of the repayment (30 years). Through sector/policy/government position shifting, possibility of new entity/structure abandoning debt and Ontario having to take a write down.
 - o Risk transfer / portion of debt that Ontario would be responsible for would be the higher risk portion.
 - o Repayment plan and impact on rate payers highly dependent on interest rates
- Public perception/reaction (could be seen as similar to the process preparing Hydro One for IPO).

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Program Design and Implementation

The proposal relies heavily on LDCs as a partner for implementation. Many of these changes will need to take place simultaneously and amongst the 70 LDCs in Ontario there is variety in size, efficiency and ability to implement change.

- Program design will require an evaluation of whether the existing programs are effective and achieving their outcomes (e.g. the OESP has a current uptake of 30% and program changes are proposed in advance of an increased effort to reach 100% uptake)
- The OESP matrix no longer follows the Low Income Measure (LIM) which creates inconsistencies between how programs are applied and may put pressure other provincial programs to increase funding amounts.

Benefits for all Consumer Classes

The Fair Hydro Plan includes some benefits for all consumer classes as well as targeted benefits to those with the greatest need. It is likely that the government will be criticized for providing benefits to those who may not be in need (e.g., wealthy cottage communities, etc.).

Stakeholder Considerations:

General public (including residential and small businesses) – Likely support a proposal that is projected to provide up to 25% in rate relief (including the 8% announced in 2016) and other targeted relief for vulnerable Ontarians, but likely to question the longer term implications. Some individuals and organizations will perceive the GA smoothing as unduly burdening future generations. Ability of the public to understand current and recent changes will heavily depend on government communications.

Large Industrial and Commercial Consumers – Will continue to be concerned with the impact of cap and trade on electricity prices and the commitment in the Climate Change Action Plan to use GGRA funds to “keep electricity rate affordable”. Will likely respond positively to the recent changes to expand ICI eligibility to some manufacturing and greenhouse Class B customers, but may be more neutral the remainder of the initiatives.

The impact of cap and trade has been added to electricity bills as of January 2017. Class B consumers have raised concerns about the cost of electricity and its impact on their business competitiveness. Although Class A electricity consumers have access to ICI, they are also concerned about the impact of cap and trade on their electricity costs. They are expecting that GGRA funds will be used to mitigate their costs. There is an expectation government is going to take specific action to mitigate their increases due to Cap & Trade, and given the initiatives proposed in this submission, there is no plan to provide further relief through the Greenhouse Gas Reduction Account. **Note:** Funding electricity support programs through the tax-base rather than the rate base will provide some saving to both Class A and B consumers.

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Tenants – Likely to support any future price mitigation measures that directly benefit them; likely to react negatively if no mitigation measures target them.

Commented [HT30]: Confirm work still ongoing on this piece

Northern communities – Likely to support the targeted RRRP delivery relief.

Indigenous communities – First Nation members who live on reserves are likely to support the proposal because of the targeted delivery relief. Other Indigenous communities (i.e., Métis, non-status, First Nations without reserve land bases) are likely to react negatively at being excluded from the delivery charge relief.

eNGOs – May react negatively towards any price relief that is not directly tied to energy conservation. May criticize the inclusion of natural gas electricity generation as part of the “Clean Energy Adjustment.”

Solar PV sector – May react negatively to price relief as it can be seen to undercut the affordability of distributed renewable generation assets such as solar PV, and undermines the economic arguments behind net metering.

LDCs – Have expressed the need for an additional tool to provide assistance to their customers who are having difficulty with their electricity bills.

Delivery:

If passed, the legislation will enable the price mitigation measures to begin to take effect on July 1, 2017. The 2017 LTEP will be released to the public in the summer 2017 and would reinforce/integrate with Ontario's Fair Hydro Plan. Regulations are required under the major components of the legislation in order to fully implement the initiative and clarify program details.

Commented [HT31]: TBC

1. Refinancing Global Adjustment assets in order to defer ratepayer costs / Mechanism to defer GA costs

Consumers will see an immediate reduction of their electricity bills as of July 1, 2017. The establishment of the regulatory asset and purchase by OPG is expected to take three to six months to implement following the introduction of enabling legislation.

Commented [HT32]: This needs more elaboration and confirmation. Last discussion I was part of on this point hadn't landed exactly how long it is expected that the IESO retains the Reg Asset for before sale to OPG.

2. Enhancing Social and Conservation Programs

OESP Enhancements

New OESP program details would require TB/MBC approval.

Changes to regulation will be required to establish and define the parameters for the proposed changes. The financial flow-through mechanism would likely be modeled after processes used for the OREC (8% rebate). The amendments made in this bill allow for a transition period where the program continues to draw on the existing IESO variance account until the account can no longer maintain the program. IESO is required to notify the Ministry of Energy when it expects the variance account to be depleted (likely sometime in the fall). At this time

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The proposed changes will take time to implement as they would require changes to the central system and the LDCs' billing systems. The OEB and their central service provider will need to work with LDCs, MOF, and the CRA on the changes to this program (delivery mechanism, funding source, application system, eligibility).

Commented [HT33]: Requires update

RRRP Enhancement

Regulations would be required to establish the details of the program. OEB estimates that the implementation would take at least six months after finalizing regulations. For this reason it is possible that for technical reasons not all LDCs will be able to implement the changes required under the program in time for the July 1 effective date. In these cases, the bill dictates that, once the changes have been made (required by October 1, 2017 at the latest), the LDC would provide a lump sum credit to customers that would otherwise have been eligible for benefits under the program starting July 1st which will put an immediate pressure on the OEB and LDCs as implementation is required no later than October 1, 2017. A mechanism will need to be created to ensure that all parties are aligned in the yearly forecasting and costing of the program.

On-Reserve First Nations Delivery Credit

The OEB would need to work with the LDCs to identify the eligible on-reserve consumers. A communications plan could include public release of the OEB report and a commitment to working with the LDCs on implementation details.

It is possible that for technical reasons not all LDCs will be able to implement the changes required under the program in time for the July 1 effective date. In these cases, the bill dictates that, once the changes have been made (required by October 1, 2017 at the latest), the LDC would provide a lump sum credit to customers that would otherwise have been eligible for benefits under the program starting July 1st.

Once available, the rebate would appear on customer's electricity bills as a reduction in, or credit for, their delivery line.

There is a risk that either non-status Indigenous communities without reserves or Metis could challenge the program on the grounds that it discriminates against them contrary to section 15 of the Charter. This risk is mitigated by the ameliorative purpose of the program and because targeting First Nations communities for a reserve-based program corresponds to the distinct circumstances of reserve-based communities, relative to other Indigenous communities. A genuinely ameliorative program that targets some people but excludes others is shielded from a section 15 challenge if it serves or advances the ameliorative goal.

Linkages:

Long-Term Energy Plan (LTEP) – Ontario is preparing to release a new LTEP in summer-fall 2017. These plans identify needs for investments over the shorter term, while broadly mapping out the direction of the sector over a 20 year timeframe. The LTEP will balance the principles of affordability, reliability, clean energy, community and Indigenous engagement, as well as conservation and demand management.

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Electricity Rate Mitigation Initiatives – The Ontario Rebate for Electricity for Electricity Consumers Act, 2016, (ORECA) put in place an 8% rebate for residential, small business customers and farms beginning January 1, 2017.

The Ontario Clean Energy Benefit (OCEB) was a five-year legislated program put in place as a broad-based, transitional measure to a cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. OCEB expired on December 31, 2015.

Debt Retirement Charge – On January 1, 2016 the government ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, and put in place the low-income targeted OESP, effective 2016. For all other consumers the DRC is scheduled to be removed by April 2018.

Industrial Conservation Initiative – Ministry of Energy program implemented in January 2011 to help large industrial consumers reduce their electricity costs by shifting electricity consumption away from peak periods. As part of the Fair Hydro Plan, ICI eligibility was recently expanded to allow for the participation of the manufacturing and greenhouse sectors with an average month peak demand greater than 500 kilowatts (kW) and less than or equal to 1 megawatt (MW). ICI benefits all electricity consumers by decreasing the need for costly peaking generation over the long term.

Affordability Fund – approved as part of Ontario's Fair Hydro Plan, and under development, the Affordability Fund is intended to expand access to conservation funding to targeted consumers that do not currently qualify as low-income for the purposes of the Home Assistance Program (HAP).

Commented [HT34]: insert

Ontario's Climate Change Action Plan (CCAP) – The CCAP, released in summer 2016, reiterated the 2016 Budget commitment and stated that Ontario intends to invest in initiatives that both reduce greenhouse gas (GHG) emissions and ensure that the net impact of cap and trade would not result in an overall increase in electricity costs for commercial and industrial consumers, and that there would be a modest benefit of up to \$2 per month, on average, to residential consumers. This commitment to residential consumers was met by the January 2017 8% rebate.

The commitment to mitigate the cap and trade impact on electricity costs for commercial and industrial consumers (i.e., Class A and B) has not been addressed. **Note:** Funding electricity support programs through the tax-base rather than the rate base will provide saving to Class A and B consumers.

The CCAP committed to a new Climate Change agency that would act as one window for the delivery of climate change-related programs. The Green Ontario Fund (GreenON)- is tasked to develop programs and services designed to:

- Reduce greenhouse gas emissions from housing from buildings and the production of goods; and

DRAFT-WITHOUT MATERIALS

- Increase uptake and overcome market barriers of low-carbon technologies and processes.

The CCAP committed to “consider options for legislation/regulation change that lessen the impact on residential tenants of increased energy costs from cap and trade”. As part of the review of the Residential Tenancies Act, the Ministry of Housing is working on a proposal that will address that commitment. The proposal is expected to come to Cabinet in spring 2017.

Commented [HT35]: To get updated language on the RTA amendments

Proposed Cabinet Minute

Approval of draft bill for introduction

Cabinet approved version **XX-XX** of this draft legislation for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process.

From: [John Kim](#)
To: [Ronald Kwan](#)
Cc: [Bruno Amara](#); [Salman Qadir](#); [Deena Padamadan](#)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Date: Wednesday, May 03, 2017 10:35:50 AM
Attachments: [OFA AnnualLendingDirective-PublicBodies 2016-17-signed-directive.pdf](#)
[OPA - Credit Facility.pdf](#)
[OIC 1051-2012.pdf](#)

Fyi, info so far. As mentioned in another email, we're looking into it.

From: Salman Qadir
Sent: Tuesday, May 02, 2017 4:28 PM
To: John Kim <John.Kim@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi John,

Just digging around on the question about what sort of approvals the OFA would need. The [Capital Investment Plan Act](#) states the following:

Policies

16. (1) The Lieutenant Governor in Council may formulate policies for a corporation.
1993, c. 23, s. 16 (1).

Directives

(2) Subject to any policies under subsection (1), the minister may issue directives in writing to a corporation on matters relating to the corporation's exercise of its powers and duties under this or any other Act. 1993, c. 23, s. 16 (2).

TBC but it looks like we would need LGIC to formulate the policy? It looks like the OFA needs to borrow money from the Province (Minister of Finance) and that requires LGIC direction to authorize the Minister to lend to the OFA – who then on-lends. I checked the past OFA Loans directives and they all reference OIC (see attached for example). It may be a question for OFA/MOF legal...

I also looked for the original directives for the OFA credit facility and found one from 2005 for the OPA – but it is not the original. It does not make reference to any OICs.... The original one seemed to have been dated December 22, 2004.

Salman

From: John Kim
Sent: Tuesday, May 02, 2017 3:12 PM
To: Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>; Salman Qadir

<Salman.Qadir@ofina.on.ca>

Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>

Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Fyi, on the IESO.

From: John Kim

Sent: Tuesday, May 02, 2017 3:11 PM

To: James Strang (MOF) <James.Strang@ontario.ca>

Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>

Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

One more point James along this line. It's fairly important in my view....

In the Minute, could we have something like:

"Note that the IESO has requested a credit facility from the OFA to manage liquidity issues between the time IESO requires financing for monthly settlements to meet the requirements of the FHP, and the time when OPG's SPV purchases the IESO regulatory asset, or as a backstop in the case of the regulatory asset not being purchased for a period of time. Note that the Minister of Finance will provide a directive to the OFA to provide a new or expanded credit facility for this purpose."

We are open to better wording from the experts on the Minute item and also as tied to the legislation terminology.

John

From: John Kim

Sent: Tuesday, May 02, 2017 2:38 PM

To: James Strang (MOF) <James.Strang@ontario.ca>

Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>

Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

While I don't see why we wouldn't facilitate the request, we would require Minister's authorization of some sort and staff level, we view that TB/MBC should be made aware of the request/requirement.

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]

Sent: Tuesday, May 02, 2017 2:34 PM

To: John Kim <John.Kim@ofina.on.ca>

Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

CO has a question below. Is this an OFA decision, or is a TB/MBC decision needed?

From: Hindmarch-Watson, Tim (CAB)
Sent: May 2, 2017 1:58 PM
To: Strang, James (TBS)
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Thanks James.

At a few points in the OFA comments they say "The IESO has requested a backstop credit facility from the OFA." Do you know if the plan is to grant this request?

Thanks!

Tim Hindmarch-Watson
416-325-4618

From: Strang, James (TBS)
Sent: May-02-17 12:43 PM
To: Hindmarch-Watson, Tim (CAB)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Tim, just got some feedback from Ontario Financing Authority.

James

From: John Kim [<mailto:John.Kim@ofina.on.ca>]
Sent: May 2, 2017 12:39 PM
To: Strang, James (TBS)
Cc: Bruno Amara
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi James,

I sense we missed the boat and there's new information but see attached comments/edits.

John

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Monday, May 01, 2017 8:51 AM
To: Didem Proulx (MTCU) <Didem.Proulx@ontario.ca>; Helen Graham (MOF) <Helen.Graham@ontario.ca>; Paul Kaufman (MOHLTC) <Paul.Kaufman@ontario.ca>; Nick Smook (MOF) <Nick.Smook@ontario.ca>; John Kim <John.Kim@ofina.on.ca>
Cc: Felix Fung (MOF) <Felix.Fung@ontario.ca>; Chris Skubel (MGS) <Chris.Skubel@ontario.ca>; Nina Arbabzadeh (EDU) <Nina.Arbabzadeh@ontario.ca>; Patrick Loughton (MOF) <Patrick.Loughton@ontario.ca>; Hosick, Sarah (TBS) <Sarah.Hosick@ontario.ca>; Sandy Luk (MOHLTC) <Sandy.Luk@ontario.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Draft note from Cabinet Office. They're looking for feedback by EOD today (May 1).

I'm happy to coordinate any responses.

James

From: Hindmarch-Watson, Tim (CAB)
Sent: April 28, 2017 3:46 PM
To: Fung, Felix (TBS); Skubel, Chris (TBS)
Cc: Strang, James (TBS); Moore, Karen (CAB)
Subject: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Hi Felix and Chris:

As mentioned earlier in the week, please find attached the draft CBN re the rate mitigation legislation for the TBS' review (password same as previous materials). This has been prepared with no materials and should be reviewed closely. I have left comments in the margin where I am looking for specific review or confirmation of particular details. I am interested in ensuring alignment in how we are characterizing the proposal and its risks.

The note is a bit on the longer side at the moment, so suggestions to economize without losing key pieces would also be helpful.

The note is undergoing concurrent review with Energy and my management now. My ADM will likely pass this along to Cindy and Karen for concurrent review given the time crunch, but please feel to pass along as well.

Please try to have any comments to me by EOD on Monday so I can get it to my DM and the Secretary on Tuesday.

Have a great weekend,

Tim Hindmarch-Watson
Policy Advisor
Justice, Resource and Environmental Policy
Policy and Delivery Division
Cabinet Office
416-325-4618

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**DIRECTIVE AND DETERMINATION
MINISTER OF FINANCE
OFA LOANS TO CONSOLIDATED PUBLIC BODIES**

To: Ontario Financing Authority ("OFA")

Pursuant to subsection 16(2) of the *Capital Investment Plan Act, 1993*, the OFA is directed to make loans to (i) the public bodies and (ii) individual public bodies within the class of public bodies (i.e. colleges and school boards) as set out in the OFA's Annual Borrowing and On-Lending Plan Fiscal Year 2016-17 which are listed in Schedule "A" hereto in a total aggregate amount of up to CAD \$305,800,000 (the "Loans").

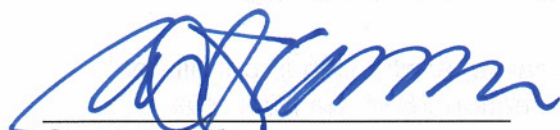
The following terms and conditions shall apply in respect of the Loans:

1. The maximum amount of each Loan to a public body and the aggregate maximum amount of Loans to a class of public bodies will be the amount specified in Schedule A hereto for each such public body or class of public bodies.
2. Each Loan shall be made for the purpose specified for that Loan in Schedule A.
3. A Loan to a public body will only be made at the request and on the recommendation of the responsible ministry for the public body.
4. Except in the case of Loans to school boards, each Loan is conditional upon prior written approval pursuant to Section 28 of the *Financial Administration Act* (FAA) to be requested by the ministry responsible for the public body. The CEO of the OFA will not act as the delegate of the Minister of Finance to provide approval under Section 28 of the FAA for any of the Loans.
5. The OFA will charge interest on the each of the Loans determined in accordance with the OFA's Lending Policy as approved by the OFA Board of Directors (the "Loan Rate"); provided that the Loan Rate shall be comprised of
 - a. The Province's total cost of funds, including commissions, to fund the Loan (the "Province's Cost of Funds"),

- b. a two and one-half (2.5) basis point spread over the Province's Cost of Funds to recover the OFA's lending costs (the "Cost Recovery Fee"), and
 - c. in addition to the Cost Recovery Fee, on Loans for projects of a commercial nature, a spread over the Province's Cost of Funds of up to sixty-five (65) basis points to reflect commercial rates, determined in accordance with the OFA's Lending Policy (the "Commercial Spread").
6. Each of the Loans shall be evidenced by a loan agreement containing terms and conditions consistent with this Directive and the OFA's Lending Policy and approved by the CEO of the OFA or the Assistant Deputy Minister, Corporate and Electricity Finance Division, OFA, or a person designated by either of them.

Pursuant to Orders in Council 675/97, 767/99, 1883/2006, 2144/2007, 300/2010, 163/2012, 1051/2012 and 354/2014, all as amended, made under subsection 22(1) of the *Capital Investment Plan Act, 1993*, the Minister of Finance is authorized to make loans to the OFA and to determine the amount of the spread to be retained by the OFA where those funds are subsequently loaned to public bodies. It is hereby determined that for each Loan made under the authority of this Directive, the amount of the spread retained by the OFA is equal to the sum of the Cost Recovery Fee and the Commercial Spread, if any, for the Loan as set out above.

Dated July 16 2016



CHARLES SOUSA
MINISTER OF FINANCE

SCHEDULE "A"

DIRECTIVE MINISTER OF FINANCE OFA LOANS TO CONSOLIDATED PUBLIC BODIES FOR 2016 -17 FISCAL YEAR

CONSOLIDATED PUBLIC BODIES	AMOUNT	PURPOSE
Colleges	Up to \$105.8 million	To finance new capital projects or refinancing of existing loans currently held with financial institutions
School Boards	Up to \$200 million	To refinance school board debt and to finance long-term capital expansion projects that have been approved by the Ministry of Education under one or more of the following programs: • Good Places to Learn • Prohibitive-to-Repair • Primary Class Size • Capital Transitional Adjustment Programs for French-Language Boards • Growth Schools • Capital Priorities Amounts • Best Start • New Pupil Places

Ontario Financing Authority

1 Dundas Street West
Suite 1400
Toronto ON M7A 1Y7

Tel (416) 325-8002
Fax (416) 325-8005

Office ontarien de financement

1 rue Dundas ouest
Bureau 1400
Toronto ON M7A 1Y7



September 26, 2005

MEMORANDUM TO:

Colin Andersen
Deputy Minister

FROM:

Gadi Mayman
CEO & Vice Chair

SUBJECT:

Ontario Power Authority: Credit Facility

The Ontario Power Authority (OPA) has requested an increase to its existing credit facility with the Ontario Financing Authority (OFA) to meet an expected increase in cash needs that could exceed the current \$500 million credit facility limit. The purpose of this memo and the attached material is to request a direction from the Minister of Finance which would increase the amount of loans that the OFA is able to provide to the OPA by \$475 million.

Please let me know if you require a further briefing or have any questions.

Gadi Mayman

Attachment

c. Karen Sadlier-Brown
Serge Imbrogno

Ministry of Finance

Office of the
Deputy Minister

Frost Building South
7 Queen's Park Cr
Toronto ON M7A 1Y7
Tel (416) 325-1590
Fax (416) 325-1595

Ministère des Finances

Bureau du
sous-ministre

Édifice Frost sud
7 Queen's Park Cr
Toronto ON M7A 1Y7
Tél (416) 325-1590
Téléc (416) 325-1595



September 26, 2005

MEMORANDUM TO: The Honourable Greg Sorbara
Minister of Finance

FROM: Colin Andersen
Deputy Minister

SUBJECT: Directive to the Ontario Financing Authority

I wanted to make you aware of an emerging issue with the Ontario Power Authority (OPA) and to seek your approval to increase the credit facility provided by the Ontario Financing Authority (OFA). The OPA has requested an increase of \$475 million to its existing credit facility with the OFA to meet an expected increase in cash needs that could exceed the current \$500 million credit facility limit. As you know, the OPA is a newly created institution and an integral part of the Government's restructured electricity market.

An existing Directive, executed on December 22, 2004, directed the OFA to provide loans to the OPA on a transitional basis until the OPA is able to access the capital markets. This Directive also established that the aggregate amount of the loans shall not exceed \$500 million at any time and that all loans outstanding must be repaid in full by December 31, 2006. It was originally estimated that \$500 million would be sufficient to meet the OPA's financing requirements for the current fiscal year. However, as a result of higher than forecast electricity prices and consumption, the OPA's financing requirements have increased substantially over the past few months.

The bulk of the OPA's financing requirements stem from its responsibility for managing and funding the Regulated Price Plan (RPP) variance account. This account tracks the difference between the price paid by low-volume and designated consumers under the Ontario Energy Board's (OEB) RPP and the actual cost of electricity. Since the province was faced with record-levels of electricity consumption and subsequently high prices throughout the summer months, the size of this account has grown significantly since June 2005.

The Honourable Greg Sorbara
Page 2

The value of OPA's loan currently outstanding is about \$386 million (for transactions up to August 2005). Since electricity prices for September continue to be significantly higher than forecast, it is expected that the OPA could require additional financing above its existing \$500 million credit facility as early as the middle of October. In addition, if prices continue to be significantly higher than originally forecasted over the next six months, then the OPA's financing requirements could be as much as \$920 million by March 2006. To ensure that the OPA has the ability to meet its financing requirements in the event that electricity prices continue to be high, staff recommend that the maximum amount of loans available to the OPA be increased by \$475 to \$975 million.

The OPA's ability to repay its loans come from its legislative authority to recover any deficit in the RPP variance account from consumers. More specifically, the existing legislation provides that when establishing the new RPP, the OEB must take into account any outstanding balance within the RPP variance account with a view to eliminate this balance over time. Therefore, when the new RPP is established on May 1, 2006, prices will reflect any RPP variance account deficit which accumulated during the 2005-06 period. In addition, a portion of the RPP variance account deficit will be recovered through a rebate from Ontario Power Generation (OPG). OPG's revenues on most of the output from its unregulated assets have an upper limit of 4.7 cents/kWh. OPG is required to pay a rebate on revenues over this amount. The payment of this rebate is currently expected to take place sometime after April 2006 and the portion of the rebate that will be paid to OPA is currently estimated to be about \$316 million.

I've attached for your review and consideration a Minister's Directive to the OFA, which would increase the amount of loans that the OFA is able to provide to the OPA by \$475 million. This Directive is necessary to ensure that the OPA will have the ability to meet its future financing requirements. If you agree with this direction, please sign the attached.

Please let me know if you require a further briefing or have any questions.

A handwritten signature in black ink, appearing to read "Colin Andersen", followed by a horizontal line.

Colin Andersen

Attachment

- c. Peter Wilkinson
Lori Spadorci
Gadi Mayman
Karen Sadlier-Brown

Ontario Power Authority: Financing Requirements

September 23, 2005

Ontario Financing Authority

Confidential Advice to Minister

Decision Sought .

- The Ontario Power Authority (OPA) has requested an increase to their existing credit facility with the Ontario Financing Authority (OFA). As a result of higher than forecast electricity prices and consumption since April 2005, the OPA's financing requirements could exceed the current \$500 million credit facility limit as early as the middle of October.

Seeking approval for:

- An increase in the OPA's existing credit facility, from \$500 million to \$975 million.

OPA's Financing Requirements

- The OPA undertakes a number of activities that have financing implications. Specifically, the OPA is responsible for managing and funding two accounts:
 - **Regulated Price Plan Variance Account (RPP Variance Account)** – This account tracks the difference between the price paid by low-volume and designated consumers under the OEB's RPP and the actual cost of electricity.
 - **Regulated Price Plan Retailer Variance Account (Retailer Variance Account)** – This account tracks the difference between the hourly Ontario electricity prices (HOEP) and retail contract prices
- In order to ensure that the OPA has the ability to effectively manage its financing requirements, the OFA is providing financial services and loans to the OPA on a transitional basis.
 - These financial services and loans are being provided by the OFA under a direction from the Minister of Finance, which was executed in December 2004.
 - The loans are provided under a Credit Agreement in the form of a credit facility of \$500 million, which provides the OPA with the flexibility to manage efficiently its cash needs by borrowing when it requires cash and repaying any loans under the credit facility when it has excess cash.
 - The interest rate charged on the loans is equal to the Province's cost of borrowing for a similar term, plus 25 basis points (i.e. 0.25%).
 - The Credit Agreement has a term of two years and all loans outstanding must be repaid in full by December 31, 2006.

OPA's Financing Shortfall

- The amount of OPA's loan with the OFA is currently about \$386 million, which represents the sum of the RPP Variance Account and the Retailer Variance Account (up to August 2005) plus the interest that has accrued on loans from previous months.
- Since electricity prices for September continue to be significantly higher than forecast, it is expected that the OPA could require additional financing above its existing \$500 million credit facility as early as the middle of October (for September activity).
 - Specifically, it is estimated that if average spot market prices exceed 8.80 cents/kWh for the month of September then the OPA's financing requirements will exceed \$500 million.
 - As of September 19, 2005, the weighted average price for September is 10.15 cents/kWh
- It was originally estimated that a \$500 million credit facility would be sufficient to meet the OPA's financing requirements for the current fiscal year. As a result of higher than forecast electricity prices and consumption, the OPA's financing requirements have increased substantially since April 2005.
 - Electricity prices have been about 23% higher than previously forecast during this period – an average of 7.53 cents/kWh versus a forecast of 6.10 cents/kWh.

OPA's Financing Requirements Could Exceed \$900 Million

- The value of OPA's loan currently outstanding is about \$386 million (for transactions up to August 2005). Based on the original price forecast that was used by the OEB in establishing the RPP for 2005-06, it is estimated the OPA's financing requirements would grow to \$591 million by March 2006. However, if prices continue to be significantly higher than originally forecasted, then the OPA's financing requirements could be as much as \$920 million by March 2006.

	Original Forecast		Revised Forecast ¹	
	Monthly Requirement	Cumulative Balance	Monthly Requirement	Cumulative Balance
Current Loan Outstanding (millions) \$386				
Future Financing Requirements (millions)				
September	\$12	\$398	\$64	\$450
October	\$30	\$428	\$76	\$526
November	\$15	\$443	\$54	\$580
December	\$23	\$466	\$67	\$646
January	\$55	\$521	\$111	\$757
February	\$44	\$565	\$91	\$848
March	\$26	\$591	\$72	\$920

¹ Assumes prices continue to be 23% higher than originally forecasted.

Proposed Direction

- Recommend to the Minister of Finance that the amount of the OPA's existing credit facility with the OFA be increased from \$500 million to \$975 million.
 - Provides OPA with the ability to meet its future financing requirements if electricity prices continue to be significantly higher than forecast.

Next Steps

- Brief Minister of Finance on OPA credit facility.
- Draft proposed Directive for Minister's consideration.
- Amend the Credit Agreement between the OFA and OPA.

Note

- OPA Board meeting on September 27 – OPA staff have indicated desire to provide a status report/and or resolution to issue at Board meeting.

Appendix

OPA's Financing Activities To Date

- The following table summarizes the monthly activity within the variance accounts managed by the OPA:

	RPP Variance Account ¹	Retailer Variance Account ²
January		\$3,308,609.02
February		\$3,326,152.93
March		\$941,659.52
April	\$37,746,763.14	(\$294,514.80)
May	\$834,094.44	(\$1,332,169.81)
June	\$73,740,977.97	(\$1,569,966.45)
July	\$115,756,091.04	(\$6,819,673.06)
August	\$175,497,486.25	(\$16,279,198.87)
Total	\$403,575,412.84	(\$18,719,101.52)

¹ For the first three months of 2005, the RPP Variance Account was funded by OEFC from the surplus accumulated in the Electricity Consumer Price Protection Fund (ECPPF). Beginning in April 2005, all balances have been funded by the OPA through an OFA loan

² The Retailer Balancing Account has been funded through an OFA loan since January 2005

OPA's Ability To Repay Its Loans

Recovery Through New RPP

- OEB will be establishing a new RPP for May 1, 2006. Existing legislation provides that when establishing the new RPP the OEB must take into account any outstanding balance within the RPP Variance Account, with a view to eliminate these balances over time.

OPG Rebate

- OPG's revenues on most of the output from its unregulated assets (non-baseload hydroelectric, coal and gas-fired stations), have an upper limit of 4.7 cents/kWh. OPG is required to pay a rebate on revenues over this amount. The payment of this rebate is currently expected to take place sometime after April 2006 (i.e. after the initial RPP period).
- To the end of March 2006, it is estimated that OPG could accumulate excess revenues of approximately \$658 million on the output from its regulated assets. Of this amount, about \$316 million would be owed to the OPA.

**DIRECTIVE
MINISTER OF FINANCE**

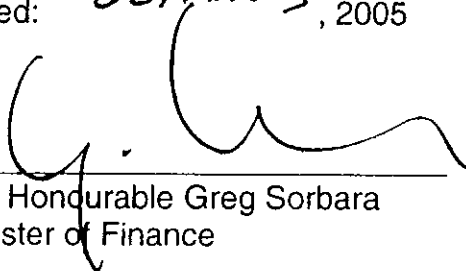
To: Ontario Financing Authority

Pursuant to a directive dated December 22nd 2004 (the "December 22, 2004 Directive") the Minister of Finance approved and directed the Ontario Financing Authority (the "OFA") to make loans (the "Loans") to the Ontario Power Authority (the "OPA") from time to time, as considered necessary by the OPA to meet its purposes, as set out below:

- The Loans shall be provided to the OPA at a rate equal to the Province of Ontario's cost of borrowing, as determined by the OFA, plus a spread of twenty-five basis points and on such other terms as the OFA deems appropriate.
- The terms of the Loans shall be set out in a Loan Agreement to be entered into by the OFA and the OPA.
- The aggregate amount of the Loans shall not exceed \$500 million at any time, and
- All amounts outstanding under the Loan Agreement shall be repaid in full by December 31, 2006.

The Minister of Finance hereby approves and directs the OFA to increase the maximum aggregate amount of the Loans from \$500 million to \$975 million. All of the other terms and conditions to which the Loans are subject pursuant to the provisions of the December 22, 2004 Directive shall remain the same.

Dated: *October 3*, 2005



The Honourable Greg Sorbara
Minister of Finance



Ontario
Executive Council
Conseil exécutif

Order in Council Décret

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that:

Sur la recommandation de la personne soussignée, le lieutenant-gouverneur, sur l'avis et avec le consentement du Conseil exécutif, décrète ce qui suit :

WHEREAS pursuant to Order in Council 675/97 made under subsection 22(1) of the *Capital Investment Plan Act, 1993*, the Minister of Finance is authorized to lend Two Billion One Hundred and Sixty Million Dollars in lawful money of Canada to the Ontario Financing Authority (the "OFA");

AND WHEREAS pursuant to Order in Council 767/99 made under subsection 22(1) of the *Capital Investment Plan Act, 1993*, the Minister of Finance is authorized to lend Six Hundred and Fifty-six Million Dollars in lawful money of Canada to the OFA;

AND WHEREAS pursuant to Order in Council 1883/2006 made under subsection 22(1) of the *Capital Investment Plan Act, 1993*, the Minister of Finance is authorized to lend Eight Hundred Million Dollars in lawful money of Canada to the OFA;

AND WHEREAS pursuant to Order in Council 2144/2007 made under subsection 22(1) of the *Capital Investment Plan Act, 1993*, the Minister of Finance is authorized to lend Two Billion Dollars in lawful money of Canada to the OFA;

AND WHEREAS pursuant to Order in Council 300/2010 made under subsection 22(1) of the *Capital Investment Plan Act, 1993*, the Minister of Finance is authorized to lend One Billion Eight Hundred Million Dollars in lawful money of Canada to the OFA;

AND WHEREAS pursuant to Order in Council 163/2012 made under subsection 22(1) of the *Capital Investment Plan Act, 1993*, the Minister of Finance is authorized to lend One Billion Seven Hundred Million Dollars in lawful money of Canada to the OFA;

AND WHEREAS the Province considers it expedient to amend Order in Council 675/97, Order in Council 767/99, Order in Council 1883/2006, Order in Council 2144/2007, Order in Council 300/2010 and Order in Council 163/2012 to allow the Minister of Finance to determine the spread to be retained by the OFA on advances made by the Minister of Finance to the OFA where the OFA subsequently loans those moneys to public bodies;

THEREFORE:

1. Order in Council 675/97, as amended by Order in Council 1709/98, Order in Council 844/2008, Order in Council 1723/2009 and Order in Council 1268/2010, is hereby amended by:

(i) deleting subparagraph (d)(ii) and replacing said subparagraph with the following subparagraph:

“(d)(ii) in the event that moneys included in an Advance are used by the OFA for the purpose of funding loans to third parties (a “Third Party Loan”), the rate of interest payable by the OFA to the Province on the portion of the Advance so used shall be adjusted effective as of the date that the portion of the Advance is used to fund the Third Party Loan so that the per annum rate of interest payable by the OFA on such moneys is equivalent to the per annum rate of interest payable to the OFA under the Third Party Loan less an amount as may be determined by the Minister of Finance in respect of such Third Party Loan or a class of such Third Party Loans, until but excluding the date on which the Third Party Loan is repaid, at which time the interest rate set out in subparagraph (i) shall again be applicable to that portion of the Advance; and”

2. Order in Council 767/99, as amended by Order in Council 844/2008, Order in Council 1723/2009 and Order in Council 1268/2010, is hereby amended by:

(i) deleting subparagraph (d)(ii) and replacing said subparagraph with the following subparagraph:

“(d)(ii) in the event that moneys included in an Advance are used by the OFA for the purpose of funding loans to third parties (a “Third Party Loan”), the rate of interest payable by the OFA to the Province on the portion of the Advance so used shall be adjusted effective as of the date that the portion of the Advance is used to fund the Third Party Loan so that the per annum rate of interest payable by the OFA on such moneys is equivalent to the per annum rate of interest payable to the OFA under the Third Party Loan less an amount as may be determined by the Minister of Finance in respect of such Third Party Loan or a class of such Third Party Loans, until but excluding the date on which the Third Party Loan is repaid, at which time the interest rate set out in

subparagraph (i) shall again be applicable to that portion of the Advance; and”

3. Order in Council 1883/2006, as amended by Order in Council 844/2008, Order in Council 1723/2009 and Order in Council 1268/2010, is hereby amended by:

(i) deleting subparagraph (c)(ii) and replacing said subparagraph with the following subparagraph:

“(c)(ii) in the event that moneys included in an Advance are used by the OFA for the purpose of funding loans to third parties (a “Third Party Loan”), the rate of interest payable by the OFA to the Province on the portion of the Advance so used shall be adjusted effective as of the date that the portion of the Advance is used to fund the Third Party Loan so that the per annum rate of interest payable by the OFA on such moneys is equivalent to the per annum rate of interest payable to the OFA under the Third Party Loan less an amount as may be determined by the Minister of Finance in respect of such Third Party Loan or a class of such Third Party Loans, until but excluding the date on which the Third Party Loan is repaid, at which time the interest rate set out in subparagraph (i) shall again be applicable to that portion of the Advance; and”

4. Order in Council 2144/2007, as amended by Order in Council 844/2008, Order in Council 1723/2009 and Order in Council 1268/2010, is hereby amended by:

(i) deleting subparagraph (c)(ii) and replacing said subparagraph with the following subparagraph:

“(c)(ii) in the event that moneys included in an Advance are used by the OFA for the purpose of funding loans to third parties (a “Third Party Loan”), the rate of interest payable by the OFA to the Province on the portion of the Advance so used shall be adjusted effective as of the date that the portion of the Advance is used to fund the Third Party Loan so that the per annum rate of interest payable by the OFA on such moneys is equivalent to the per annum rate of interest payable to the OFA under the Third Party Loan less an amount as may be determined by the Minister of Finance in respect of such Third Party Loan or a class of such Third Party Loans, until but excluding the date on which the Third Party Loan is repaid, at which time the interest rate set out in subparagraph (i) shall again be applicable to that portion of the Advance; and”

5. Order in Council 300/2010, as amended by Order in Council 1268/2010, is hereby amended by:

(i) deleting subparagraph (c)(ii) and replacing said subparagraph with the following subparagraph:

“(c)(ii) in the event that moneys included in an Advance are used by the OFA for the purpose of funding loans to third parties (a “Third Party Loan”), the rate of interest payable by the OFA to the Province on the portion of the Advance so used shall be adjusted effective as of the date that the portion of the Advance is used to fund the Third Party Loan so that the per annum rate of interest payable by the OFA on such moneys is equivalent to the per annum rate of interest payable to the OFA under the Third Party Loan less an amount as may be determined by the Minister of Finance in respect of such Third Party Loan or a class of such Third Party Loans, until but excluding the date on which the Third Party Loan is repaid, at which time the interest rate set out in subparagraph (i) shall again be applicable to that portion of the Advance: and”

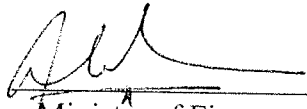
6. Order in Council 163/2012 is hereby amended by:

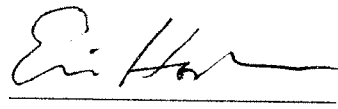
(i) deleting subparagraph (c)(ii) and replacing said subparagraph with the following subparagraph:

“(c)(ii) in the event that moneys included in an Advance are used by the OFA for the purpose of funding loans to third parties (a “Third Party Loan”), the rate of interest payable by the OFA to the Province on the portion of the Advance so used shall be adjusted effective as of the date that the portion of the Advance is used to fund the Third Party Loan so that the per annum rate of interest payable by the OFA on such moneys is equivalent to the per annum rate of interest payable to the OFA under the Third Party Loan less an amount as may be determined by the Minister of Finance in respect of such Third Party Loan or a class of such Third Party Loans, until but excluding the date on which the Third Party Loan is repaid, at which time the interest rate set out in subparagraph (i) shall again be applicable to that portion of the Advance: and”

7. The forms of promissory note which evidence the loans pursuant to Order in Council 675/97, Order in Council 767/99, Order in Council 1883/2006, Order in Council 2144/2007, Order in Council 300/2010 and Order in Council 163/2012, are

hereby amended, as applicable, to reflect the above changes to the Orders in Council in respect of all amounts advanced to the OFA on or after the date of this Order.

Recommended 
Minister of Finance

Concurred 
Chair of Cabinet

Approved
and Ordered JUL 18 2012
Date


Lieutenant Governor

From: [Ronald Kwan](#)
To: [Marianne Nguyen \(MCYS\)](#); [Christopher Pearce \(MOI\)](#)
Subject: FW: Direction to IESO
Date: Monday, December 19, 2016 7:07:52 PM
Attachments: [NUGs, OEFC, FIT, 2015-2020 Conservation First Framework, and the Industrial Accelerator Progra.pdf](#)

Hi Marianne,

You likely saw this.

Ron

From: Emily Kerr
Sent: December-19-16 18:56
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: Direction to IESO

Hi Ron,

The direction to IESO which includes NUGs is attached.

Emily

Ministry of Energy

Office of the Minister

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Fax: 416-327-6754

Ministère de l'Énergie

Bureau du ministre

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Tél. : 416 327-6758
Télec. : 416 327-6754



December 16, 2016

Mr. Bruce Campbell
President and Chief Executive Officer
Independent Electricity System Operator
1600–120 Adelaide Street West
Toronto ON M5H 1T1

Dear Mr. Campbell:

RE: Non-Utility Generators (NUGs) under Contract with the Ontario Electricity Financial Corporation (OEFC), Feed-in Tariff (FIT) Procurements, 2015-2020 Conservation First Framework, and Delivery of Programs under the Conservation First Framework and the Industrial Accelerator Program

I write in my capacity as the Minister of Energy in order to exercise the statutory power I have to amend or revoke continued directions issued to the Independent Electricity System Operator (IESO) under the *Electricity Act, 1998*, as amended (the "Act").

BACKGROUND

NUGs under Contract with OEFC

On December 14, 2015, the IESO was directed to discontinue negotiations for New Contracts (as defined in that direction) for NUGs, while continuing to engage stakeholders, including NUG representatives as relevant, in the IESO's development of an Ontario capacity auction, rules and protocol for Ontario-based capacity exports and to continue to consider NUGs as options to maintain regional reliability.

A number of the thermal NUGs (OEFC NUGs) have contracts (OEFC Contracts) with the Ontario Electricity Financial Corporation (OEFC) that have not yet ended. The terms of those OEFC Contracts, which were originally signed nearly 20 years ago, provide incentives for most of the OEFC NUGs to operate as baseload electricity resources.

Ontario has put in place legislation for its new cap and trade program to limit greenhouse gas pollution while moving to a low-carbon economy. Given the evolution of Ontario's electricity system, there are opportunities to increase system value, reduce costs for Ontario electricity consumers and lower carbon emissions in the province, if the IESO is able to negotiate replacement contracts (IESO Contracts) with OEFC NUGs that incentivize them to operate in a manner that is better aligned with the integrated power system's needs.

.../cont'd

FIT Procurements

In the 2013 Long-Term Energy Plan, the Ministry of Energy committed to exploring the evolution of the microFIT program to net metering. To support this process, the ministry established an Advisory Working Group and undertook stakeholder engagement, including a posting of proposed updates to Ontario's 2005 Net Metering regulation on the Environmental and Regulatory registries in August 2016. Proposed updates include, for example, removal of the existing 500 kW limit on net metered facilities and enabling storage. The ministry is proposing to bring forward amendments to the regulation in the near future and has identified other potential changes for further consultation in winter 2017.

The ministry has also commenced work on the development of the next Long-Term Energy Plan, with stakeholder and Indigenous engagement to be concluded this month. The development of the next LTEP provides an opportunity to examine the future role of distributed renewable energy generation under an updated net metering regulation and in a manner that recognizes the province's robust electricity supply. It is anticipated that the next LTEP will be published in spring 2017.

2015-2020 Conservation First Framework

On March 31, 2014, the IESO was directed to continue to provide, through its Conservation Fund, support and funding for new and innovative electricity conservation initiatives as a means to assist licensed electricity distributors (Distributors) and others in their conservation efforts.

On November 16, 2015, the Ontario Energy Board (the "Board") issued its five-point multi-year *Regulated Price Plan Roadmap* (Roadmap) to redesign the Regulated Price Plan (RPP) to better respond to policy objectives, improve system efficiency, and to give consumers greater control.

One of the major elements of the Roadmap is the implementation of pilot projects for new pricing models and non-price tools (Pilot Projects). The Pilot Projects would, among other things, test alternative pricing options that are aimed at achieving objectives of the RPP. The results of the Pilot Projects would provide an objective basis to inform future decisions about RPP pricing and the design of new tools for customers to manage their electricity usage and provide for increased system efficiency.

On July 18, 2016, the Board issued its *Regulated Price Plan Roadmap: Guideline for Pilot Projects on RPP Pricing*, inviting Distributors to participate in developing and implementing Pilot Projects. A number of Distributors have filed applications with the Board for that purpose.

These Pilot Projects will be funded through the Conservation Fund so the IESO may use the Pilot Project results to help identify potential complementary Conservation and Demand Management programs or initiatives that could assist RPP customers in responding to different pricing mechanisms.

.../cont'd

Delivery of Programs under the Conservation First Framework and the Industrial Accelerator Program

With the Conservation First Framework and renewed Industrial Accelerator Program now underway for close to two years, opportunities have been identified to improve the availability of programs province-wide for customers. A list of all approved Province-Wide Distributor CDM Programs, Local Distributor CDM Programs and associated program rules are located on the IESO website.

DIRECTION

Therefore, pursuant to my authority under section 25.32 of the Act, I hereby make the following amendments to the directions listed below:

1. NUGs under Contract with OEFC

The direction dated December 14, 2015, titled “Non-Utility Generator Projects, Combined Heat and Power Standard Offer Program 2.0, Chaudière Falls Hydroelectric Generation and Whitesand First Nation Biomass Cogeneration” is amended as follows:

- 1.1 Paragraph 1.1 is amended to read as follows:
“Subject to paragraphs 1.4 and 1.5 below, discontinue negotiations for New Contracts for NUGs.”
- 1.2 The following new paragraphs 1.4 and 1.5 are added:
 - 1.4 Enter into negotiations with the OEFC NUGs regarding a new IESO Contract to change the incentive structure for supplying electricity or capacity so that the facilities operate in a manner that better aligns with the integrated power system’s needs and that would satisfy all of the following requirements:
 - (i) Expected cost and operability benefits for the Ontario electricity system are greater than the cost and operability benefits afforded under the current OEFC Contract;
 - (ii) All IESO obligations under the IESO Contract end no later than the date on which the current term of the existing OEFC Contract expires
 - 1.5 The IESO is not required by this direction to enter into an IESO Contract with an OEFC NUG where the IESO is unable to reach agreement with the OEFC NUG on terms that satisfy the requirements set out in paragraph 1.4 of this direction.

2. FIT Procurements

FIT 5 Procurement Target

The direction dated June 24, 2015, titled “Feed-in Tariff (FIT) Program” is amended as follows:

.../cont'd

- 2.1 The paragraph that reads: "For greater clarity, the IESO shall include any unallocated capacity from each future annual microFIT target to the subsequent FIT procurement target" is revoked.
- 2.2 The paragraph that reads: "Similarly, the IESO shall add any remaining unallocated capacity from FIT procurements to the subsequent FIT procurement target." is revoked.

The direction dated April 5, 2016, titled "Future Renewable Energy Procurements" is amended as follows:

- 2.3 Paragraphs 2.2 and 2.3 are revoked.
- 2.4 A new paragraph 2.2 is added that reads: "The FIT 5 procurement target shall be up to 150 MW."

FIT 6 Procurement

The direction dated June 12, 2013, titled "Renewable Energy Program" is amended as follows:

- 2.5 By revoking the paragraph that reads: "Furthermore, in each of the next four years, starting in 2014, the OPA will award up to 150 MW of contracts for Small FIT Projects. If the full annual Small FIT MW procurement target is not allocated in a given year, the remaining capacity will be added to the Small FIT MW procurement target in the following year." and replacing that paragraph with a new paragraph that reads: "Furthermore, in each of the next three years, starting in 2014, the IESO will award up to 150 MW of contracts for Small FIT Projects. If the full annual Small FIT MW procurement target is not allocated in a given year, the remaining capacity will be added to the Small FIT MW procurement target in the following year. The final FIT application period will be held in 2016. The IESO shall cease accepting applications under the FIT program by December 31, 2016 and any unallocated procurement target at the end of that procurement process will remain unallocated."

3. 2015-2020 Conservation First Framework

Support and Funding for Research and Innovation

- 3.1. The direction issued on March 31, 2014, entitled "2015-2020 Conservation First Framework" is amended by adding the following new paragraphs to the section titled "Support and Funding for Research and Innovation":
 - 8.3 The IESO shall provide, through its Conservation Fund, support and funding for pilot projects for new pricing models and non-price tools (Pilot Projects) specified by the Board.

.../cont'd

- 8.4 Since the Pilot Projects are adhering to the Board's guidelines and processes related to such Pilot Projects, the IESO shall provide such Conservation Fund funding without adherence to the Conservation Fund's application process or other requirements. The IESO will create a simplified process for enabling Distributors delivering Pilot Projects to access Conservation Fund funding.
- 8.5 The IESO shall make Conservation Fund funding available for the Pilot Projects in such amounts as determined by the Board.
- 8.6 The IESO shall fund only Distributor costs for delivering the Pilot Projects in accordance with the Board specified Pilot Project expenditures. The IESO will pay the Distributor for Pilot Project costs on the terms set out in the procurement contract with the Distributor delivering the Pilot Project.
- 8.7 The IESO shall enter into one or more procurement contracts with Distributors selected by the Board to fund the Pilot Projects specified by the Board. The IESO shall use a simplified and expedited procurement process for that purpose.

4. Delivery of Programs under the Conservation First Framework and the Industrial Accelerator Program

- 4.1. The direction issued on March 31, 2014 entitled "2015-2020 Conservation First Framework" is amended by adding a new sub-section 3.6 to Section 3: CDM Plans and Programs, as follows:
 - 3.6 i. Further to the Distributor CDM Requirement that includes making available a core set of province-wide CDM programs in their licensed service areas, and despite Section 1.3 of the Conservation First Framework Direction, the IESO shall request that Distributors that are not making available one or more approved Province-Wide Distributor CDM Programs, considering the eligible program participants in their licensed service area per the program rules, resubmit revised CDM Plans by May 1, 2017 outlining how they will make all approved Province-Wide Distributor CDM Programs available in their licensed service areas beginning in 2017 using their allocated CDM budget. As new approved Province-Wide Distributor CDM Programs and associated program rules become available, the IESO shall request Distributors with eligible program participants to resubmit revised CDM Plans within four months, outlining how they will make the new approved Province-Wide Distributor CDM Program available in their licensed service area.

.../cont'd

- ii. Where a Distributor with eligible program participants is not making an approved Province-Wide Distributor CDM Program(s) available to eligible program participants in its licensed service area, the IESO shall deliver the Province-Wide Distributor CDM Program(s) in that Distributor's licensed service area if a Distributor has not submitted a revised CDM Plan indicating an intention to do so per the timelines in Section 3.6(i).
 - iii. The IESO shall establish a budget to fund the approved Province-Wide Distributor CDM Programs that are to be delivered by the IESO that is within the budget established under Section 1.4 of the Conservation First Framework Direction.
 - iv. Where the IESO delivers an approved Province-Wide Distributor CDM Program in a Distributor's licensed service area, the associated electricity savings shall not count toward that Distributor's CDM Target.
- 4.2. The direction issued on July 25, 2014, entitled "Industrial Accelerator Program" is amended by adding the following new sub-sections to section 3.1, as follows:
- vi. The IESO shall undertake a pay-for-performance pilot program for customers that are eligible for the Industrial Accelerator Program that is consistent with the Centrally-Delivered Pay-for-Performance Multi-Distributor CDM Program.
 - vii. The IESO shall allow transmission-connected customers with distribution-connected sites to elect to have their transmission-connected and distribution-connected sites administered through the Industrial Accelerator Program. Any associated electricity savings that result from distribution-connected sites participating in the Industrial Accelerator Program shall count toward Distributor CDM Targets under the Conservation First Framework Direction.

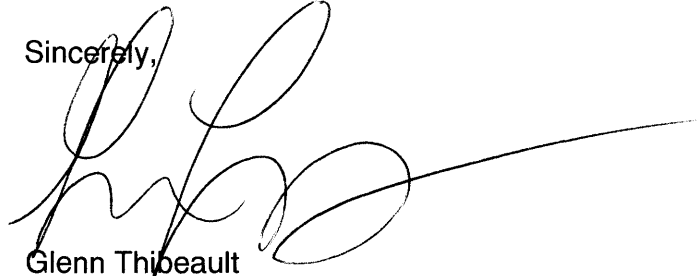
General

- 5.1. This direction supplements and amends previous directions to the extent that a previous direction is inconsistent with the provisions of this direction. All other terms of any previous directions remain in full force and effect.

.../cont'd

This direction takes effect on the date it is issued.

Sincerely,



Glenn Thibeault
Minister

- c. Tim O'Neill, Chair, Independent Electricity System Operator
Rosemarie Leclair, Chair and CEO, Ontario Energy Board
Serge Imbrogno, Deputy Minister, Ministry of Energy
Carolyn Calwell, Director, Legal Services Branch, Ministries of Energy; Economic Development and Growth; Infrastructure; Research, Innovation and Science; and Accessibility

From: [Ronald Kwan](#)
To: [Gadi Mayman](#)
Subject: FW: Direction to IESO
Date: Monday, December 19, 2016 7:08:08 PM
Attachments: [NUGs, OEFC, FIT, 2015-2020 Conservation First Framework, and the Industrial Accelerator Progra.pdf](#)

Hi Gadi,

FYI.

Ron

From: Emily Kerr
Sent: December-19-16 18:56
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: Direction to IESO

Hi Ron,

The direction to IESO which includes NUGs is attached.

Emily

Ministry of Energy

Office of the Minister

4th Floor, Hearst Block
900 Bay Street
Toronto ON M7A 2E1
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Ministère de l'Énergie

Bureau du ministre

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Tél. : 416 327-6758
Télec. : 416 327-6754



December 16, 2016

Mr. Bruce Campbell
President and Chief Executive Officer
Independent Electricity System Operator
1600–120 Adelaide Street West
Toronto ON M5H 1T1

Dear Mr. Campbell:

RE: Non-Utility Generators (NUGs) under Contract with the Ontario Electricity Financial Corporation (OEFC), Feed-in Tariff (FIT) Procurements, 2015-2020 Conservation First Framework, and Delivery of Programs under the Conservation First Framework and the Industrial Accelerator Program

I write in my capacity as the Minister of Energy in order to exercise the statutory power I have to amend or revoke continued directions issued to the Independent Electricity System Operator (IESO) under the *Electricity Act, 1998*, as amended (the "Act").

BACKGROUND

NUGs under Contract with OEFC

On December 14, 2015, the IESO was directed to discontinue negotiations for New Contracts (as defined in that direction) for NUGs, while continuing to engage stakeholders, including NUG representatives as relevant, in the IESO's development of an Ontario capacity auction, rules and protocol for Ontario-based capacity exports and to continue to consider NUGs as options to maintain regional reliability.

A number of the thermal NUGs (OEFC NUGs) have contracts (OEFC Contracts) with the Ontario Electricity Financial Corporation (OEFC) that have not yet ended. The terms of those OEFC Contracts, which were originally signed nearly 20 years ago, provide incentives for most of the OEFC NUGs to operate as baseload electricity resources.

Ontario has put in place legislation for its new cap and trade program to limit greenhouse gas pollution while moving to a low-carbon economy. Given the evolution of Ontario's electricity system, there are opportunities to increase system value, reduce costs for Ontario electricity consumers and lower carbon emissions in the province, if the IESO is able to negotiate replacement contracts (IESO Contracts) with OEFC NUGs that incentivize them to operate in a manner that is better aligned with the integrated power system's needs.

.../cont'd

FIT Procurements

In the 2013 Long-Term Energy Plan, the Ministry of Energy committed to exploring the evolution of the microFIT program to net metering. To support this process, the ministry established an Advisory Working Group and undertook stakeholder engagement, including a posting of proposed updates to Ontario's 2005 Net Metering regulation on the Environmental and Regulatory registries in August 2016. Proposed updates include, for example, removal of the existing 500 kW limit on net metered facilities and enabling storage. The ministry is proposing to bring forward amendments to the regulation in the near future and has identified other potential changes for further consultation in winter 2017.

The ministry has also commenced work on the development of the next Long-Term Energy Plan, with stakeholder and Indigenous engagement to be concluded this month. The development of the next LTEP provides an opportunity to examine the future role of distributed renewable energy generation under an updated net metering regulation and in a manner that recognizes the province's robust electricity supply. It is anticipated that the next LTEP will be published in spring 2017.

2015-2020 Conservation First Framework

On March 31, 2014, the IESO was directed to continue to provide, through its Conservation Fund, support and funding for new and innovative electricity conservation initiatives as a means to assist licensed electricity distributors (Distributors) and others in their conservation efforts.

On November 16, 2015, the Ontario Energy Board (the "Board") issued its five-point multi-year *Regulated Price Plan Roadmap* (Roadmap) to redesign the Regulated Price Plan (RPP) to better respond to policy objectives, improve system efficiency, and to give consumers greater control.

One of the major elements of the Roadmap is the implementation of pilot projects for new pricing models and non-price tools (Pilot Projects). The Pilot Projects would, among other things, test alternative pricing options that are aimed at achieving objectives of the RPP. The results of the Pilot Projects would provide an objective basis to inform future decisions about RPP pricing and the design of new tools for customers to manage their electricity usage and provide for increased system efficiency.

On July 18, 2016, the Board issued its *Regulated Price Plan Roadmap: Guideline for Pilot Projects on RPP Pricing*, inviting Distributors to participate in developing and implementing Pilot Projects. A number of Distributors have filed applications with the Board for that purpose.

These Pilot Projects will be funded through the Conservation Fund so the IESO may use the Pilot Project results to help identify potential complementary Conservation and Demand Management programs or initiatives that could assist RPP customers in responding to different pricing mechanisms.

.../cont'd

Delivery of Programs under the Conservation First Framework and the Industrial Accelerator Program

With the Conservation First Framework and renewed Industrial Accelerator Program now underway for close to two years, opportunities have been identified to improve the availability of programs province-wide for customers. A list of all approved Province-Wide Distributor CDM Programs, Local Distributor CDM Programs and associated program rules are located on the IESO website.

DIRECTION

Therefore, pursuant to my authority under section 25.32 of the Act, I hereby make the following amendments to the directions listed below:

1. NUGs under Contract with OEFC

The direction dated December 14, 2015, titled “Non-Utility Generator Projects, Combined Heat and Power Standard Offer Program 2.0, Chaudière Falls Hydroelectric Generation and Whitesand First Nation Biomass Cogeneration” is amended as follows:

- 1.1 Paragraph 1.1 is amended to read as follows:
“Subject to paragraphs 1.4 and 1.5 below, discontinue negotiations for New Contracts for NUGs.”
- 1.2 The following new paragraphs 1.4 and 1.5 are added:
 - 1.4 Enter into negotiations with the OEFC NUGs regarding a new IESO Contract to change the incentive structure for supplying electricity or capacity so that the facilities operate in a manner that better aligns with the integrated power system’s needs and that would satisfy all of the following requirements:
 - (i) Expected cost and operability benefits for the Ontario electricity system are greater than the cost and operability benefits afforded under the current OEFC Contract;
 - (ii) All IESO obligations under the IESO Contract end no later than the date on which the current term of the existing OEFC Contract expires
 - 1.5 The IESO is not required by this direction to enter into an IESO Contract with an OEFC NUG where the IESO is unable to reach agreement with the OEFC NUG on terms that satisfy the requirements set out in paragraph 1.4 of this direction.

2. FIT Procurements

FIT 5 Procurement Target

The direction dated June 24, 2015, titled “Feed-in Tariff (FIT) Program” is amended as follows:

.../cont'd

- 2.1 The paragraph that reads: "For greater clarity, the IESO shall include any unallocated capacity from each future annual microFIT target to the subsequent FIT procurement target" is revoked.
- 2.2 The paragraph that reads: "Similarly, the IESO shall add any remaining unallocated capacity from FIT procurements to the subsequent FIT procurement target." is revoked.

The direction dated April 5, 2016, titled "Future Renewable Energy Procurements" is amended as follows:

- 2.3 Paragraphs 2.2 and 2.3 are revoked.
- 2.4 A new paragraph 2.2 is added that reads: "The FIT 5 procurement target shall be up to 150 MW."

FIT 6 Procurement

The direction dated June 12, 2013, titled "Renewable Energy Program" is amended as follows:

- 2.5 By revoking the paragraph that reads: "Furthermore, in each of the next four years, starting in 2014, the OPA will award up to 150 MW of contracts for Small FIT Projects. If the full annual Small FIT MW procurement target is not allocated in a given year, the remaining capacity will be added to the Small FIT MW procurement target in the following year." and replacing that paragraph with a new paragraph that reads: "Furthermore, in each of the next three years, starting in 2014, the IESO will award up to 150 MW of contracts for Small FIT Projects. If the full annual Small FIT MW procurement target is not allocated in a given year, the remaining capacity will be added to the Small FIT MW procurement target in the following year. The final FIT application period will be held in 2016. The IESO shall cease accepting applications under the FIT program by December 31, 2016 and any unallocated procurement target at the end of that procurement process will remain unallocated."

3. 2015-2020 Conservation First Framework

Support and Funding for Research and Innovation

- 3.1. The direction issued on March 31, 2014, entitled "2015-2020 Conservation First Framework" is amended by adding the following new paragraphs to the section titled "Support and Funding for Research and Innovation":
 - 8.3 The IESO shall provide, through its Conservation Fund, support and funding for pilot projects for new pricing models and non-price tools (Pilot Projects) specified by the Board.

.../cont'd

- 8.4 Since the Pilot Projects are adhering to the Board's guidelines and processes related to such Pilot Projects, the IESO shall provide such Conservation Fund funding without adherence to the Conservation Fund's application process or other requirements. The IESO will create a simplified process for enabling Distributors delivering Pilot Projects to access Conservation Fund funding.
- 8.5 The IESO shall make Conservation Fund funding available for the Pilot Projects in such amounts as determined by the Board.
- 8.6 The IESO shall fund only Distributor costs for delivering the Pilot Projects in accordance with the Board specified Pilot Project expenditures. The IESO will pay the Distributor for Pilot Project costs on the terms set out in the procurement contract with the Distributor delivering the Pilot Project.
- 8.7 The IESO shall enter into one or more procurement contracts with Distributors selected by the Board to fund the Pilot Projects specified by the Board. The IESO shall use a simplified and expedited procurement process for that purpose.

4. Delivery of Programs under the Conservation First Framework and the Industrial Accelerator Program

- 4.1. The direction issued on March 31, 2014 entitled "2015-2020 Conservation First Framework" is amended by adding a new sub-section 3.6 to Section 3: CDM Plans and Programs, as follows:
 - 3.6 i. Further to the Distributor CDM Requirement that includes making available a core set of province-wide CDM programs in their licensed service areas, and despite Section 1.3 of the Conservation First Framework Direction, the IESO shall request that Distributors that are not making available one or more approved Province-Wide Distributor CDM Programs, considering the eligible program participants in their licensed service area per the program rules, resubmit revised CDM Plans by May 1, 2017 outlining how they will make all approved Province-Wide Distributor CDM Programs available in their licensed service areas beginning in 2017 using their allocated CDM budget. As new approved Province-Wide Distributor CDM Programs and associated program rules become available, the IESO shall request Distributors with eligible program participants to resubmit revised CDM Plans within four months, outlining how they will make the new approved Province-Wide Distributor CDM Program available in their licensed service area.

.../cont'd

- ii. Where a Distributor with eligible program participants is not making an approved Province-Wide Distributor CDM Program(s) available to eligible program participants in its licensed service area, the IESO shall deliver the Province-Wide Distributor CDM Program(s) in that Distributor's licensed service area if a Distributor has not submitted a revised CDM Plan indicating an intention to do so per the timelines in Section 3.6(i).
 - iii. The IESO shall establish a budget to fund the approved Province-Wide Distributor CDM Programs that are to be delivered by the IESO that is within the budget established under Section 1.4 of the Conservation First Framework Direction.
 - iv. Where the IESO delivers an approved Province-Wide Distributor CDM Program in a Distributor's licensed service area, the associated electricity savings shall not count toward that Distributor's CDM Target.
- 4.2. The direction issued on July 25, 2014, entitled "Industrial Accelerator Program" is amended by adding the following new sub-sections to section 3.1, as follows:
- vi. The IESO shall undertake a pay-for-performance pilot program for customers that are eligible for the Industrial Accelerator Program that is consistent with the Centrally-Delivered Pay-for-Performance Multi-Distributor CDM Program.
 - vii. The IESO shall allow transmission-connected customers with distribution-connected sites to elect to have their transmission-connected and distribution-connected sites administered through the Industrial Accelerator Program. Any associated electricity savings that result from distribution-connected sites participating in the Industrial Accelerator Program shall count toward Distributor CDM Targets under the Conservation First Framework Direction.

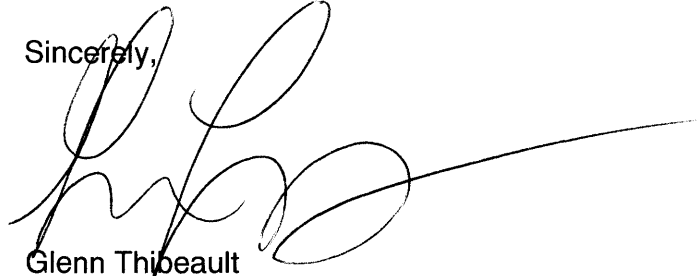
General

- 5.1. This direction supplements and amends previous directions to the extent that a previous direction is inconsistent with the provisions of this direction. All other terms of any previous directions remain in full force and effect.

.../cont'd

This direction takes effect on the date it is issued.

Sincerely,



Glenn Thibeault
Minister

- c. Tim O'Neill, Chair, Independent Electricity System Operator
Rosemarie Leclair, Chair and CEO, Ontario Energy Board
Serge Imbrogno, Deputy Minister, Ministry of Energy
Carolyn Calwell, Director, Legal Services Branch, Ministries of Energy; Economic Development and Growth; Infrastructure; Research, Innovation and Science; and Accessibility

From: [Bruno Amara](#)
To: [Ronald Kwan](#)
Cc: [Deena Padamadan](#); [Salman Qadir](#); [Gavin He](#); [John Kim](#)
Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx
Date: Monday, May 01, 2017 6:39:31 PM
Attachments: [GA - IESO Role and Financing v4 - extract v9 Markup2.pptx](#)

Ron

Looked good to me. I had a couple of minor wording suggestions slide 1 and 2.

Bruno

From: Ronald Kwan
Sent: Monday, May 01, 2017 6:21 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Deena Padamadan <Deena.Padamadan@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi John,

How about this?

Ron

From: John Kim
Sent: May-01-17 17:42
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Deena Padamadan <Deena.Padamadan@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron,

Some edits. As discussed, I am not sure if we can say definitively what OPG Trust is expected to do.

John

From: Ronald Kwan
Sent: Friday, April 28, 2017 3:18 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Thanks Bruno.

I changed it to Energy's PW.

Ron

From: Bruno Amara
Sent: April-28-17 15:14
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron

We're fine with additional edits. See attached.

Thanks
Bruno

From: Ronald Kwan
Sent: Friday, April 28, 2017 2:53 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi,

I made a few more edits.

Ron

From: Ronald Kwan
Sent: April-28-17 14:11
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Bruno,

I had been thinking, to make it easier for Energy, to simply work with their version of the flow chart from the March CabSub.

That said, their version may have been updated since then anyways, but they could take out suggestions in.

I also added reworked some parts of the text slide, and dropped some detail, as it was rather dense – may still be!

Thanks,
Ron

From: Bruno Amara
Sent: April-28-17 11:28
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron

Attached are the updated slides per you request.

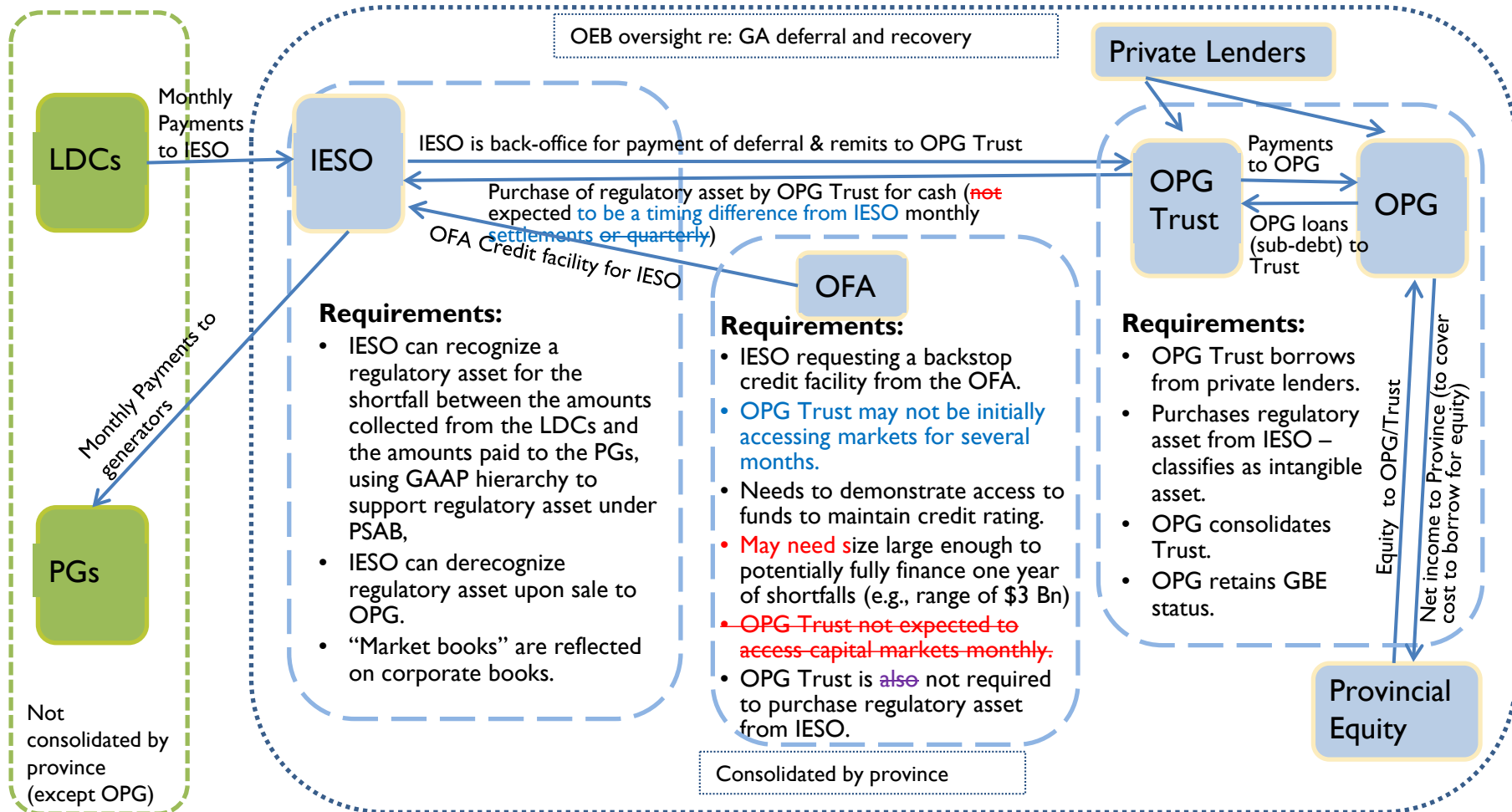
Thanks
Bruno

GA Financing Plan: Role of IESO

Corporate and Electricity Finance Division
April 28, 2017

GA Smoothing – Proposed Structure

- The following diagram provides an overview of the proposed GA smoothing structure, as well as interactions between sector entities and elements required to meet accounting objectives.



▶ **Note:** Proposed structure is subject to legal and accounting confirmation, absent that confirmation, there would be a fiscal impact to the province.

IESO Financing Requirements

- IESO will need to ensure that it continues to have the funds available to provide payments to generators on a monthly basis as part of the IESO settlements process, while recoveries from LDCs for Regulated Price Plan (RPP) / Fair Hydro Plan eligible customers will be lower.
- IESO has an existing credit facility from the OFA; however, a new or expanded facility is being requested.
- IESO would require financing to compensate generators should it be required to hold any portion of the unpurchased Regulatory Asset beyond each monthly settlement period.
 - OPG Trust is not expected to [access public capital markets for several months after the start of the FHP, and may be purchasing the asset with a lag vs monthly settlements](#). Also, OPG Trust is not ~~nor is it~~ required to purchase the regulatory asset.
 - IESO will need a credit facility for interim financing.
 - IESO may require longer-term financing to maintain the deferral financing plan, should the OPG Trust not be able to access debt markets on a timely basis for purchase of some or all of the regulatory asset.
- Based on Ministry of Energy's GA deferral plan, it is estimated that approximately \$2.5-3.0 billion need to be deferred per year for over first 10 years, equal to approximately \$200-250 million per month, on average.¹
 - The [size of the](#) credit facility required to backstop IESO could be \$2.5 to \$3.0 billion [per year](#). [TBC]
- [The monthly and annual amount being deferred and the resulting monthly amounts can be substantially different than forecast](#) based on various factors, such as seasonality or electricity usage, as well as potential changes to electricity costs from OEB rate decisions, with IESO estimating deferral amounts as high as \$400 million per month.
- Other factors that may increase IESO's financing requirements:
 - IESO will also incur financing charges that will need to be refinanced.
 - The financing and administration costs that OPG Trust incurs will need to be paid.
- There is an accounting risk on how OFA financing of the IESO requirements would be treated.
 - Even if IESO is allowed to recognized the Regulatory Asset, there is a risk as to whether this recognition will be [permitted under the accounting standards \(PSAS\) upon consolidation with the Province](#).

¹ Based on Ministry of Energy's annual GA deferral amounts, assuming the monthly deferral is equally-weighted.

From: [Kim Marshall](#)
To: [Ronald Kwan](#)
Subject: FW: OFA FH credit request - draft letter
Date: Monday, May 01, 2017 7:59:24 AM

Ron can we pls have a quick 10min call re the IESO credit facility and next steps. I am following up while Anthony is away this week. Let me know when works. Thanks

Kimberly Marshall | VP, Corporate Services & CFO
Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
Web: www.ieso.ca/jeso.ca | Twitter: [IESO_Tweets\[twitter.com\]](https://twitter.com/IESO_Tweets) | LinkedIn: [IESO\[linkedin.com\]](https://www.linkedin.com/company/ieso)

Corporate Services collaborates with you to deliver solutions and expertise that enable the IESO to achieve its goals.

Conservation: www.saveONenergy.ca/saveONenergy.ca | Twitter: [saveONenergyOnt\[twitter.com\]](https://twitter.com/saveONenergyOnt) |
LinkedIn: [saveONenergy\[linkedin.com\]](https://www.linkedin.com/company/saveONenergy)

From: Anthony Martinello
Sent: April 30, 2017 10:32 AM
To: Kim Marshall
Subject: Re: OFA FH credit request - draft letter

Ronald kwan was generally ok with the 3 billion proposed. No one else raised concern just need a directive from minister to move forward.

From: Kim.Marshall@ieso.ca
Sent: April 30, 2017 10:02 AM
To: Anthony.Martinello@ieso.ca
Subject: Re: OFA FH credit request - draft letter

Did u agree on a \$. What about the 28 days.

Sent from my iPhone

On Apr 30, 2017, at 10:00 AM, Anthony Martinello <Anthony.Martinello@ieso.ca> wrote:

Kim, Michael

Based on my call with the OFA on Friday, the following are action items:

- OFA requests that the IESO send a letter to OFA on the FEP \$ credit request (see attached rough draft – for your comments/edits);
- OFA will seek a directive from the Minister to approve any such IESO credit (OFA did not have any opinion on the quantum the IESO needs, just the OFA needs a directive in order to move forward);

I spoke with Moodys on Friday and they view the IESO's FEP credit needs to be tied

directly to the province. So, if my IESO \$ amount request from the OFA ends up being not enough, Moody's expects that the province will step up and amend the credit facility so the IESO does not have a solvency issue.

Also, see last Oct 2016 letter on \$975 renewal request.

Regards.

<mime-attachment>

<IESO_OFA FEP 2017 Credit Letter v1.docx>

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From: [Ronald Kwan](#)
To: [John Kim](#); [Bruno Amara](#)
Cc: [Gavin He](#)
Subject: FW: OFA : IESO - Fair Hydro funding call April 28
Date: Wednesday, April 26, 2017 11:28:37 AM

Hi John, Bruno,

FYI, and note the reference to O.Reg 280/14. We last amended that in 2015. Would you review to see if you think an amendment is recommended / required.

Thanks,
Ron

From: Anthony Martinello [mailto:Anthony.Martinello@ieso.ca]
Sent: April-26-17 11:06
To: Kim Marshall <Kim.Marshall@ieso.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; Victor Buza <Victor.Buza@ieso.ca>
Subject: OFA : IESO - Fair Hydro funding call April 28

Proposed Agenda for Friday's discussions:

1.
IESO's need to have \$ commitment for funding Fair Hydro shortfalls – we can discuss the quantum during the call

Background to support the \$ commitment's rationale:

- Fair Hydro plan propose to lower bills for the next 4 years – with no recovery until post 2022;
- OPG has no requirement to purchase from the IESO;
- For any purchases made, OPG may need a timing delay (liquidity, alignment for investors timing etc.) – may be one or two months after IESO settles the Fair Hydro shortfall each month;
- The monthly Fair Hydro amounts will continue to have +/- forecast variance amounts (these are expected to be funded by IESO, same as RPP today) and the OEB will consider these variances for each FH rate setting

2.
The current \$975M OFA-IESO credit facility may be utilized to include the Fair Hydro funding commitment

Background:

- The current \$975M includes a component for today's RPP shortfalls – so this amount can be reduced or transformed into the Fair Hydro commitment;
- Looking for more flexibility on the current minimum 28 day borrowing period,.. if OPG buys

from IESO would like IESO to pay down the debt as soon as possible;

- Moody's (IESO rating) will be examining if IESO has sufficient capacities to fund FH;
- Examine material adverse clause to accommodate FH

3.

IESO to examine whether O.Reg 280/14 needs to be updated for Fair Hydro – if so, will need IESO Board and Minister of Finance's approvals;

Regards.

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From: [Ronald Kwan](#)
To: [John Kim](#)
Subject: FW: OFA : IESO
Date: Thursday, April 13, 2017 10:45:40 AM

Hi John,

FYI.

Ron

From: Mike Manning
Sent: April-13-17 10:42
To: 'Kim Marshall' <Kim.Marshall@ieso.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Anthony Martinello <Anthony.Martinello@ieso.ca>
Cc: Michael Boll <Michael.Boll@ieso.ca>
Subject: RE: OFA : IESO

Tuesday at 2:30 would work best for me.

Mike

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: Thursday, April 13, 2017 10:37 AM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Anthony Martinello <Anthony.Martinello@ieso.ca>
Cc: Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>
Subject: RE: OFA : IESO

Apologies, can we pls plan to do this tues or wed after 2:30?

Kimberly Marshall | VP, Corporate Services & CFO
Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
Web: www.ieso.ca/jeso.ca | Twitter: [IESO_Tweets\[twitter.com\]](https://twitter.com/IESO_Tweets) | LinkedIn: [IESO\[linkedin.com\]](https://www.linkedin.com/company/ieso)

Corporate Services collaborates with you to deliver solutions and expertise that enable the IESO to achieve its goals.

Conservation: www.saveONenergy.ca/saveONenergy.ca | Twitter: [saveONenergyOnt\[twitter.com\]](https://twitter.com/saveONenergyOnt) |
LinkedIn: [saveONenergy\[linkedin.com\]](https://www.linkedin.com/company/saveONenergy)

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April 13, 2017 10:22 AM
To: Anthony Martinello
Cc: Kim Marshall; Michael Boll; Mike Manning
Subject: RE: OFA : IESO

Hi Anthony,

Gadi asked if Mike and I could get back to you on this. When would be a good time for you for a call. I'm free this morning until about 11:45.

Regards,
Ron

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

Mr. Mayman,

Kim and I would like to set up a 30min call with you to discuss the proposed Fair Hydro rollout and the potential impact on the IESO credit needs.

Would you be available next week/preferred date? Let me know and I will send out a meeting invite.

Regards

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From: [Ronald Kwan](#)
To: [John Kim](#); [Bruno Amara](#)
Subject: FW: OFA-IESO, discussion re Fair Hydro
Date: Sunday, April 16, 2017 12:04:09 PM

Hi,

Please review and comment.

If this is on-going, and potentially not just short-term, I'd be inclined to ask about certainty of recovery, accounting treatment, and I might think we'd need to brief up, as this is for a purpose not discussed at the time the facility was provided (even if the facility does not explicitly restrict its use).

Ron

From: Anthony Martinello [mailto:Anthony.Martinello@ieso.ca]
Sent: April-16-17 11:55 AM
To: Kim Marshall <Kim.Marshall@ieso.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; Victor Buza <Victor.Buza@ieso.ca>
Subject: OFA-IESO, discussion re Fair Hydro

Below are the proposed agenda items for our meeting.

Agenda:

1. Draw Amounts

- IESO may need to fund a) Fair Hydro forecast variances (short term), and b) Fair Hydro amounts not purchased by the OPG SPV (long term);
- in order to minimize costs and maximize cash-flow flexibility (matching to OPG SPV buys) – any appetite to amending the current 28 day minimum for draws;

2. IESO's Fair Hydro role

- IESO's credit rating agencies (Moody's Aa2, and DBRS) will examine IESO's credit capacities/solvency – need to update IESO/OFA's credit facilities to remove material adverse effect clauses or similar clauses and acknowledge/agree IESO's role in the Fair Hydro plan and commitment to advance funds under the credit facility if needed for the Fair Hydro cash-flows.

3. General

General comments regarding IESO's Fair Hydro needs vs. IESO regular ongoing needs (corporate and market)

Regards.

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dissemination, distribution or copying of this e-mail message or any files transmitted with it is strictly prohibited. If you have received this message in error, or are not the named recipient(s), please notify the sender immediately and delete this e-mail message.

From: [Ronald Kwan](#) on behalf of [Anthony Martinello](#)
To: [John Kim](#); [Kim Marshall](#); [Ronald Kwan](#); [Michael Boll](#); [Mike Manning](#); [Ken Kandeepan](#); [Victor Buza](#)
Subject: FW: OFA-IESO, discussion re Fair Hydro

From: Anthony Martinello
Sent: Thursday, April 13, 2017 8:21:10 PM UTC
To: Anthony Martinello; Kim Marshall; Ronald Kwan; Michael Boll; Mike Manning; Ken Kandeepan; Victor Buza
Subject: OFA-IESO, discussion re Fair Hydro
When: Tuesday, April 18, 2017 1:30 PM-2:00 PM.
Where: New Conference call-in: 416-933-8665, 4157721

Moderator name: Anthony Martinello
Toll-free dial-in number: 1 888-402-9166
Local dial-in number: 416-933-8665
Conference ID: 4157721

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From: [Bruno Amara](#)
To: [Ronald Kwan](#)
Cc: [John Kim](#); [Salman Qadir](#)
Subject: FW: Requirements for OFA to lend to IESO
Date: Thursday, May 04, 2017 3:15:22 PM
Attachments: [Requirements for the OFA to lend to the IESO v2.docx](#)

Hi Ron

Attached is a draft note on process for approval for OFA to lend to the IESO.

Thanks

Bruno

REQUIREMENTS FOR THE OFA TO LEND TO THE IESO

The IESO will require a revolving credit facility in its role for delivering on the Fair Hydro Plan under the proposed Fair Hydro Act. As the OFA currently provides a \$975 million credit facility to the IESO for other purposes, it is proposed that the OFA provide a new credit facility to the IESO, in an amount of up to \$3 billion [TBC].

Approvals Required by the OFA

The following approvals are required by the OFA to accommodate the request to provide financing to the IESO:

- 1) An Order-in-Council is required for the Minister of Finance to lend to the OFA.
- 2) A Directive from Minister of Finance is required for the OFA to on-lend to the IESO.
- 3) An executed credit agreement between the OFA and the IESO.

1. Order-in-Council (OIC)

An OIC is required to authorize the Minister of Finance to lend to the OFA. Ministry of Finance Legal Services Branch would need to be engaged to facilitate the request.

- The existing \$975 million credit facility was covered under OIC 675/97 which authorized the Minister of Finance to lend a revolving \$2.16 billion to the OFA. This OIC was originally obtained in 1997.

It is understood that upon drafting the OIC (by MOF Legal), the OIC would need final approval from Lieutenant Governor in Council LGIC as required under section 22(1) of the *Capital Investment Plan Act*, 1993.

- The OIC would go through Deputy Minister of Finance, Minister of Finance, Chair of Cabinet for briefing/sign-offs and finally to the LGIC for approval.

To draft the OIC, the following details will be required:

- i. Dollar Value of Loan from the Minister of Finance to the OFA
- ii. Maturity Date of the Loan

Interest Rate of the Loan (in the past, this was Ontario 90-day T-bill or the interest rate to be charged by OFA to borrower +/- spread)

2. Minister's Directive

Once the Minister of Finance has the authority under an OIC, a Minister's Directive can authorize the OFA to lend to IESO. The Directive can outline specific terms and conditions as needed.

3. Executed Credit Agreement

With a Minister's Directive approved, the OFA and IESO can work to execute a credit agreement, subject to any terms and conditions of the Directive and any policy considerations.

From: [Gadi Mayman](#)
To: [Mike Manning](#); [Ronald Kwan](#)
Cc: [Anna Strathy](#); [Gavin He](#)
Subject: Fw: OFA : IESO
Date: Thursday, April 13, 2017 8:00:48 AM

Hi Mike and Ron, could one of you please get back to Anthony and handle this?

Thanks,
Gadi

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

Mr. Mayman,

Kim and I would like to set up a 30min call with you to discuss the proposed Fair Hydro rollout and the potential impact on the IESO credit needs.

Would you be available next week/preferred date? Let me know and I will send out a meeting invite.

Regards

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From: [Ronald Kwan](#)
To: [Emily Kerr](#)
Subject: Fw: OFA : IESO
Date: Thursday, April 13, 2017 6:11:50 PM
Attachments: [image001.png](#)

Hi Emily,

Can't recall if I sent this to you.

Note the comment on "and the legislative need for a thread directly from individual ratepayers to the lenders to the GA smoothing. "

I think that speaks to tying the costs of the GA to consumers still.

Ron

From: Gadi Mayman
Sent: April 13, 2017 11:26 AM
To: Ronald Kwan
Cc: Mike Manning; Anna Strathy; Gavin He; Ken Kandeepan
Subject: Re: OFA : IESO

Yes, that was the crux of the OEB's concern, given that's not how the system currently works when a ratepayer doesn't pay their bill.

From: Ronald Kwan
Sent: Thursday, April 13, 2017 11:06 AM
To: Gadi Mayman
Cc: Mike Manning; Anna Strathy; Gavin He; Ken Kandeepan
Subject: RE: OFA : IESO

Hi Gadi,

All very interesting.

On one point, how would a thread directly from individual ratepayers to the lenders to the GA smoothing work? That would seem particularly challenging.

Ron

From: Gadi Mayman
Sent: April-13-17 10:47
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>

Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>

Subject: Re: OFA : IESO

Thanks, this came up at this morning's rate mitigation meeting, and the IESO people were happy to hear that we're on this, as they're a little nervous about how they're going to finance the regulatory asset until OPG is set up to take it on and pay for it.

I'm adding Ken to close the loop on the exchange that we had last night about the OPG letter - I asked Serge to add in the OFA, and he instructed Steen to do so, and, yes, the letter will be posted, at some point, on OPG's website.

In the half hour that I was able to attend the meeting, the discussion was around the legislation. The biggest point of contention was about OPG's need to have a direct recourse to ratepayers, and the legislative need for a thread directly from individual ratepayers to the lenders to the GA smoothing. The OEB doesn't like that concept at all. The other point that is of interest to us is that they are not looking at putting the guarantee mechanism into the legislation - although there will be some description in the legislation about what, I think they called indemnification will be needed, and then they will leave the guarantee to a commercial one. No surprise that OPG's dealer advisors are saying they need a full provincial guarantee, which OPG is pushing back on, and saying that the guarantee can only be if a future government changes the value of the regulatory asset (this is where the indemnification language in the legislation is necessary). Cindy, of course, as well as me for different reasons, is fussed about the nature of that guarantee, so we asked if they could sort that out with the dealers before the legislation is tabled. We don't want to end up with the dealers holding OPG hostage six months from now - not that they'd ever do that, would they Mike 😊
?

I'm sure Scott will send out his fuller synopsis later today, and that'll also cover what happened in the last hour, after I'd left.

Gadi

From: Ronald Kwan

Sent: Thursday, April 13, 2017 8:37:54 AM

To: Gadi Mayman

Cc: Mike Manning; Anna Strathy; Gavin He

Subject: Re: OFA : IESO

Hi Gadi,

Will do.

Ron

On Apr 13, 2017, at 8:00 AM, Gadi Mayman <Gadi.Mayman@ofina.on.ca> wrote:

Hi Mike and Ron, could one of you please get back to Anthony and handle this?

Thanks,
Gadi

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

Mr. Mayman,

Kim and I would like to set up a 30min call with you to discuss the proposed Fair Hydro rollout and the potential impact on the IESO credit needs.

Would you be available next week/preferred date? Let me know and I will send out a meeting invite.

Regards

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From: [Ronald Kwan](#)
To: [John Kim](#)
Subject: Fwd: OFA-IESO loan
Date: Saturday, January 21, 2017 12:14:48 PM

Hi John,

FYI.

Ron

Begin forwarded message:

From: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Date: January 20, 2017 at 10:37:09 PM EST
To: "Bharat Patel (MOF)" <Bharat.Patel3@ontario.ca>, Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>
Cc: John Psinas <John.Psinas@ofina.on.ca>, "Nadine Petsche (MOF)" <Nadine.Petsche@ontario.ca>, "Veinot, Cindy (TBS)" <Cindy.Veinot@ontario.ca>
Subject: RE: OFA-IESO loan

Hi Bharat,

Thanks for looking into how the two OEFC facilities with IESO are recorded, and agreed that it's important to have IESO explain how it what it records in its operating statements and in its market books.

Did you see where IESO recorded the credit facility from the OFA? A main area of interest discussed at the meeting today was on how the IESO records the Regulated Price Plan amounts, and it's the RPP balances that the OFA credit facility is in place for the IESO to be able to access for financing if it needs to.

Ron

-----Original Message-----

From: Patel, Bharat (TBS) [<mailto:Bharat.Patel3@ontario.ca>]
Sent: January-20-17 7:30 PM
To: Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>
Cc: John Psinas <John.Psinas@ofina.on.ca>; Nadine Petsche (MOF) <Nadine.Petsche@ontario.ca>; Veinot, Cindy (TBS) <Cindy.Veinot@ontario.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: Re: OFA-IESO loan

But all this items are on accounting books. IESO has \$90M loan payable to OEFC and \$95M line of credit see not#6 of IESO f/s.

Cindy,

I don't expect any loan amount would be off the books. This is cash and if they use the market book concept, the question is how they reconciled banks?

May be IESO can revisit it's documents and explain to us how market books vs. Accounting books work from the perspective of IESO.

Thanks,
Bharat

Sent from my BlackBerry 10 smartphone on the Rogers network.
From: Ken Kandeepan
Sent: Friday, January 20, 2017 7:15 PM
To: Patel, Bharat (TBS)
Cc: John Psinas; Petsche, Nadine (TBS); Veinot, Cindy (TBS); Kwan, Ronald (OFA)
Subject: Re: OFA-IESO loan

Sorry one small correction, pls replace OEFC with OFA in my previous email. As Ron pointed out earlier the loan is with the OFA.

Thanks

Ken k

On Jan 20, 2017, at 6:45 PM, Ken Kandeepan <Ken.Kandeepan@ofina.on.ca><<mailto:Ken.Kandeepan@ofina.on.ca>>> wrote:

Hi Bharat

Ron has provided details with regard to the loan itself so I will stick to the accounting. The loan is presented as an asset in OEFC's books and financial statements and the interest on the loan is treated as interest revenue. Obviously, the OEFC funds any drawdowns by IESO on the credit facility by borrowing.

Since IESO is also line by line consolidated I was under impression that upon consolidation in the PA the OEFC's asset is eliminated by the IESO loan, however given that the latter is part of IESO's market books I am not sure how the consolidation works.

Hope this is helpful, if you have any questions pls don't hesitate to email or call on my cell 647-202-4373.

Thanks

Ken k

On Jan 20, 2017, at 5:13 PM, Patel, Bharat (TBS) <Bharat.Patel3@ontario.ca><<mailto:Bharat.Patel3@ontario.ca>>> wrote:

Ken/John,

Not sure if you are the right person to ask, but can you please help to get the answer for \$100M RRP program support that OFA provides to IESO? We are interested in how this loan is recorded (i.e. on the books vs. market)? if on the books where? And if market how it works?

Thanks,
Bharat

From: Veinot, Cindy (TBS)
Sent: January-20-17 5:05 PM
To: Patel, Bharat (TBS)
Cc: Petsche, Nadine (TBS)
Subject: FW: OFA-IESO loan

See below -- can you see how OFA has this amount recorded -- its apparently on the market books.

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January-20-17 3:36 PM
To: Veinot, Cindy (TBS)
Subject: RE: OFA-IESO loan

market

Kimberly Marshall | VP, Corporate Services & CFO Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
Web: www.ieso.ca/ieso.ca | https://urldefense.proofpoint.com/v2/url?u=http-3A__www.ieso.ca&d=CwMFAg&c=qG_YuclTZ0aBAapRaQkKEgrMWFFI0Cr1_eykjin9FuiQ&r=sDTJf9rVmfT9K92u269doOHn6NwIN5Ssoa0mhVrZmimM&m=yQLw9Izwwiurx0rmH856eKtId62jHpveSR-3WViN30VIs&s=9lCuRuL_UEDHOp7oeDTUxvOfhg3HsKeR0SpMVmBwm7mM&e=> | Twitter: https://urldefense.proofpoint.com/v2/url?u=http-3A__www.twitter.com_ieso-5Ftvees&d=CwMFAg&c=qG_YuclTZ0aBAapRaQkKEgrMWFFI0Cr1_eykjin9FuiQ&r=sDTJf9rVmfT9K92u269doOHn6NwIN5Ssoa0mhVrZmimM&m=yQLw9Izwwiurx0rmH856eKtId62jHpveSR-3WViN30VIs&s=YvF25PluOlznmCqpKofADrBNM0UUXIcOwIPlag89B0&e=> | LinkedIn: https://urldefense.proofpoint.com/v2/url?u=https-3A__www.linkedin.com_company_ieso&d=CwMFAg&c=qG_YuclTZ0aBAapRaQkKEgrMWFFI0Cr1_eykjin9FuiQ&r=sDTJf9rVmfT9K92u269doOHn6NwIN5Ssoa0mhVrZmimM&m=yQLw9Izwwiurx0rmH856eKtId62jHpveSR-3WViN30VIs&s=JK274HtsLd4Cz3TOG0kzccQ1CK9027K4woYF4nkb5a&e=>

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3A_www.linkedin.com/company/saveonenergy-2Dontario&d=CwMFAg&c=qG_Yucl.TZOaBAapRaQkKEgrMWFFI0Cr1_eykjin9FtiQ&r=sDTjf9tVmfT9K92u269doOHn6NwIN5Soa0mhVrZmimM&m=yQLw9Jzwuix0rmH856eKtI62jHpveSR-3WViN3QVIs&s=OEQuM39y1dm-V8E8NKFSdvormiaC_JRRg6L-cRCvE7c&e=>

From: Veinot, Cindy (TBS) [<mailto:Cindy.Veinot@ontario.ca>]
Sent: January 20, 2017 3:35 PM
To: Kim Marshall
Subject: RE: OFA-IESO loan

*** EXTERNAL email. Please be cautious and evaluate before you click on links, open attachments, or provide credentials. ***

Thanks – is this loan recorded on the accounting books (vs. the market books?)

Cindy

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January-20-17 3:32 PM
To: Veinot, Cindy (TBS)
Subject: OFA-IESO loan

Cindy, the IESO currently has a monthly payable to the OFA. Right now it is in the 100million range support the rpp program. Not sure how that is currently treated by the OFA. thanks

Kimberly Marshall | VP, Corporate Services & CFO Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202

120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1

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From: Ronald.Kwan@ofina.on.ca
To: [Gadi Mayman](#)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 6:19:07 PM

Hi Gadi,

FYI.

Has there been much discussion on this in the Thursday morning meetings?

Ron

Begin forwarded message:

From: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Date: April 17, 2017 at 3:59:19 PM EDT
To: "Scott Nelms (ENERGY)" <Scott.Nelms@ontario.ca>
Subject: Re: OFA-IESO, discussion re Fair Hydro

Thanks Scott.

Has the accounting treatment been discussed in the case of IESO financing through the OFA? Would it make a difference if the bulk of the Reg asset is sold to OPG in a given year, but some fraction is retained by IESO?

As for other components of the TB Report Back, I would assume that one approval item is the operating asset appropriation amount in Energy for the equity injection. Is that right?

Ron

On Apr 17, 2017, at 3:51 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

I think we want to get as much covered off in the TB sub, so if something needs to be included that seems like the right place. As far as I know nothing has been drafted as everything is focused on landing the legislation.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:38 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Understood. And will this be part of the TB Report Back in a couple weeks?

Ron

On Apr 17, 2017, at 3:05 PM, Nelms, Scott (MOF)
<Scott.Nelms@ontario.ca> wrote:

If OPG decides it no longer has the ability to purchase the asset permanently, IESO needs a way to finance on a long term basis.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:03 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Thanks. In the latter case, though, would that be assumed not as a temporary situation -- otherwise, why a long term facility?

I would have otherwise assumed it was still a temporary situation.

Ron

On Apr 17, 2017, at 1:30 PM, Nelms, Scott (MOF)
<Scott.Nelms@ontario.ca> wrote:

I have yet to see any numbers. I think we are still at the concept level. As you know, OPG will buy the asset from IESO on an ongoing basis. What has yet to be determined is frequency of these transactions, which could be anywhere from weeks to 3 months of delay. Therefore IESO needs a larger credit facility from OFA to meet this temporary shortfall.

In addition, there may be circumstances where OPG does not purchase the asset (either due to temporary market conditions or overall capacity issues). Therefore IESO needs the capacity to finance these shortfalls until the

market recovers or Province decides on a different course of action. I see this as a contingent fund, which only needs to become available in the event one of these circumstances arise.

From: Ronald Kwan
[<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 10:52 AM
To: Nelms, Scott (MOF)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro

Hi Scott,

I am likely behind the curve on this.

I could see short term financing needs, especially early on perhaps, but long term financing from the OFA (vs OPG'S SPV)?

Why is that arising?

Thanks,
Ron

Begin forwarded message:

From: Anthony Martinello
<Anthony.Martinello@ieso.ca>
Date: April 16, 2017 at 11:55:08 AM EDT
To: Kim Marshall
<Kim.Marshall@ieso.ca>, Ronald Kwan
<Ronald.Kwan@ofina.on.ca>, Michael Boll
<Michael.Boll@ieso.ca>, Mike Manning
<Mike.Manning@ofina.on.ca>, Ken Kandeepan
<Ken.Kandeepan@ofina.on.ca>, Victor Buza
<Victor.Buza@ieso.ca>
Subject: OFA-IESO, discussion re Fair Hydro

Below are the proposed agenda items for our meeting.

Agenda:

1. Draw Amounts

- IESO may need to fund a) Fair Hydro forecast variances (short term), and b) Fair Hydro amounts not purchased by the OPG SPV (long term);
- in order to minimize costs and maximize cash-flow flexibility (matching to OPG SPV buys) – any appetite to amending the current 28 day minimum for draws;

2. IESO's Fair Hydro role

- IESO's credit rating agencies (Moody's Aa2, and DBRS) will examine IESO's credit capacities/solvency – need to update IESO/OFA's credit facilities to remove material adverse effect clauses or similar clauses and acknowledge/agree IESO's role in the Fair Hydro plan and commitment to advance funds under the credit facility if needed for the Fair Hydro cash-flows.

3. General

General comments regarding IESO's Fair Hydro needs vs. IESO regular ongoing needs (corporate and market)

Regards.

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From: [Ronald Kwan](#)
To: [Scott Nelms \(ENERGY\)](#)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 10:51:31 AM

Hi Scott,

I am likely behind the curve on this.

I could see short term financing needs, especially early on perhaps, but long term financing from the OFA (vs OPG'S SPV)?

Why is that arising?

Thanks,
Ron

Begin forwarded message:

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Date: April 16, 2017 at 11:55:08 AM EDT
To: Kim Marshall <Kim.Marshall@ieso.ca>, Ronald Kwan <Ronald.Kwan@ofina.on.ca>, Michael Boll <Michael.Boll@ieso.ca>, Mike Manning <Mike.Manning@ofina.on.ca>, Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>, Victor Buza <Victor.Buza@ieso.ca>
Subject: OFA-IESO, discussion re Fair Hydro

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3. General

- General comments regarding IESO's Fair Hydro needs vs. IESO regular ongoing needs

(corporate and market)

Regards.

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From: [Ronald Kwan](#)
To: [Gadi Mayman](#)
Cc: [Mike Manning](#); [Ken Kandeepan](#)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 6:33:51 PM

Hi Gadi,

FYI.

Has there been much discussion on this in the Thursday morning meetings?

While the OFA has a facility or the old OPA businesses of the IESO, and the OEFC for the IESO, a long-term facility for this purpose would be new, and not what Cabinet/TB may be expecting.

Even for the short term, I thought there had been some discussion earlier of OPG drawing on other facilities.

Ron

Begin forwarded message:

From: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Date: April 17, 2017 at 3:59:19 PM EDT
To: "Scott Nelms (ENERGY)" <Scott.Nelms@ontario.ca>
Subject: Re: OFA-IESO, discussion re Fair Hydro

Thanks Scott.

Has the accounting treatment been discussed in the case of IESO financing through the OFA? Would it make a difference if the bulk of the Reg asset is sold to OPG in a given year, but some fraction is retained by IESO?

As for other components of the TB Report Back, I would assume that one approval item is the operating asset appropriation amount in Energy for the equity injection. Is that right?

Ron

On Apr 17, 2017, at 3:51 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

I think we want to get as much covered off in the TB sub, so if something needs to be included that seems like the right place. As far as I know nothing has been drafted as everything is focused on landing the legislation.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:38 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Understood. And will this be part of the TB Report Back in a couple weeks?

Ron

On Apr 17, 2017, at 3:05 PM, Nelms, Scott (MOF)
<Scott.Nelms@ontario.ca> wrote:

If OPG decides it no longer has the ability to purchase the asset permanently, IESO needs a way to finance on a long term basis.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:03 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Thanks. In the latter case, though, would that be assumed not as a temporary situation -- otherwise, why a long term facility?

I would have otherwise assumed it was still a temporary situation.

Ron

On Apr 17, 2017, at 1:30 PM, Nelms, Scott (MOF)
<Scott.Nelms@ontario.ca> wrote:

I have yet to see any numbers. I think we are still at the concept level. As you know, OPG will buy the asset from IESO on an ongoing basis. What has yet to be determined is frequency of these transactions, which could be anywhere from weeks to 3 months of delay. Therefore IESO needs a larger credit facility from OFA to meet this temporary shortfall.

In addition, there may be circumstances where OPG does not purchase the asset (either due to temporary market conditions or overall capacity issues). Therefore IESO needs the capacity to finance these shortfalls until the market recovers or Province decides on a different course of action. I see this as a contingent fund, which only needs to become available in the event one of these circumstances arise.

From: Ronald Kwan
[<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 10:52 AM
To: Nelms, Scott (MOF)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro

Hi Scott,

I am likely behind the curve on this.

I could see short term financing needs, especially early on perhaps, but long term financing from the OFA (vs OPG'S SPV)?

Why is that arising?

Thanks,
Ron

Begin forwarded message:

From: Anthony Martinello
<Anthony.Martinello@ieso.ca>
Date: April 16, 2017 at 11:55:08 AM EDT
To: Kim Marshall
<Kim.Marshall@ieso.ca>, Ronald Kwan
<Ronald.Kwan@ofina.on.ca>, Michael Boll
<Michael.Boll@ieso.ca>, Mike Manning
<Mike.Manning@ofina.on.ca>,

Ken Kandeepan

<Ken.Kandeepan@ofina.on.ca>,

Victor Buza

<Victor.Buza@ieso.ca>

**Subject: OFA-IESO, discussion re
Fair Hydro**

Below are the proposed agenda items for our meeting.

Agenda:

1. Draw Amounts

-IESO may need to fund a) Fair Hydro forecast variances (short term), and b) Fair Hydro amounts not purchased by the OPG SPV (long term);
-in order to minimize costs and maximize cash-flow flexibility (matching to OPG SPV buys) – any appetite to amending the current 28 day minimum for draws;

2. IESO's Fair Hydro role

-IESO's credit rating agencies (Moody's Aa2, and DBRS) will examine IESO's credit capacities/solvency – need to update IESO/OFA's credit facilities to remove material adverse effect clauses or similar clauses and acknowledge/agree IESO's role in the Fair Hydro plan and commitment to advance funds under the credit facility if needed for the Fair Hydro cash-flows.

3. General

General comments regarding IESO's Fair Hydro needs vs. IESO regular ongoing needs (corporate and market)

Regards.

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From: [Bruno Amara](#)
To: [Ronald Kwan](#)
Cc: [John Kim](#); [Salman Qadir](#)
Subject: IESO credit facility
Date: Friday, May 05, 2017 4:10:15 PM
Attachments: [GA - IESO Role and Financing v4 - extract v12.pptx](#)

Hi Ron

We added a note about the need for an OIC in the attached deck. Also below is some draft wording for a Note to be included in Energy's submission. I have sent it to TBS asking for comment and noting that it is placeholder that can be finalized early next week. I have not yet heard back from TBS.

Note, that in order to ensure that the IESO has the flexibility to cover clean energy costs, if for some reason the Trust, at any time, does not purchase any portion of the deferred Global Adjustment amounts payments, a new credit facility is being requested by the IESO. An order-in-council will be sought to allow the OFA to be able to provide the new credit facility to the IESO, for an amount to be determined as per the requirements of the Fair Hydro Plan.

Bruno

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

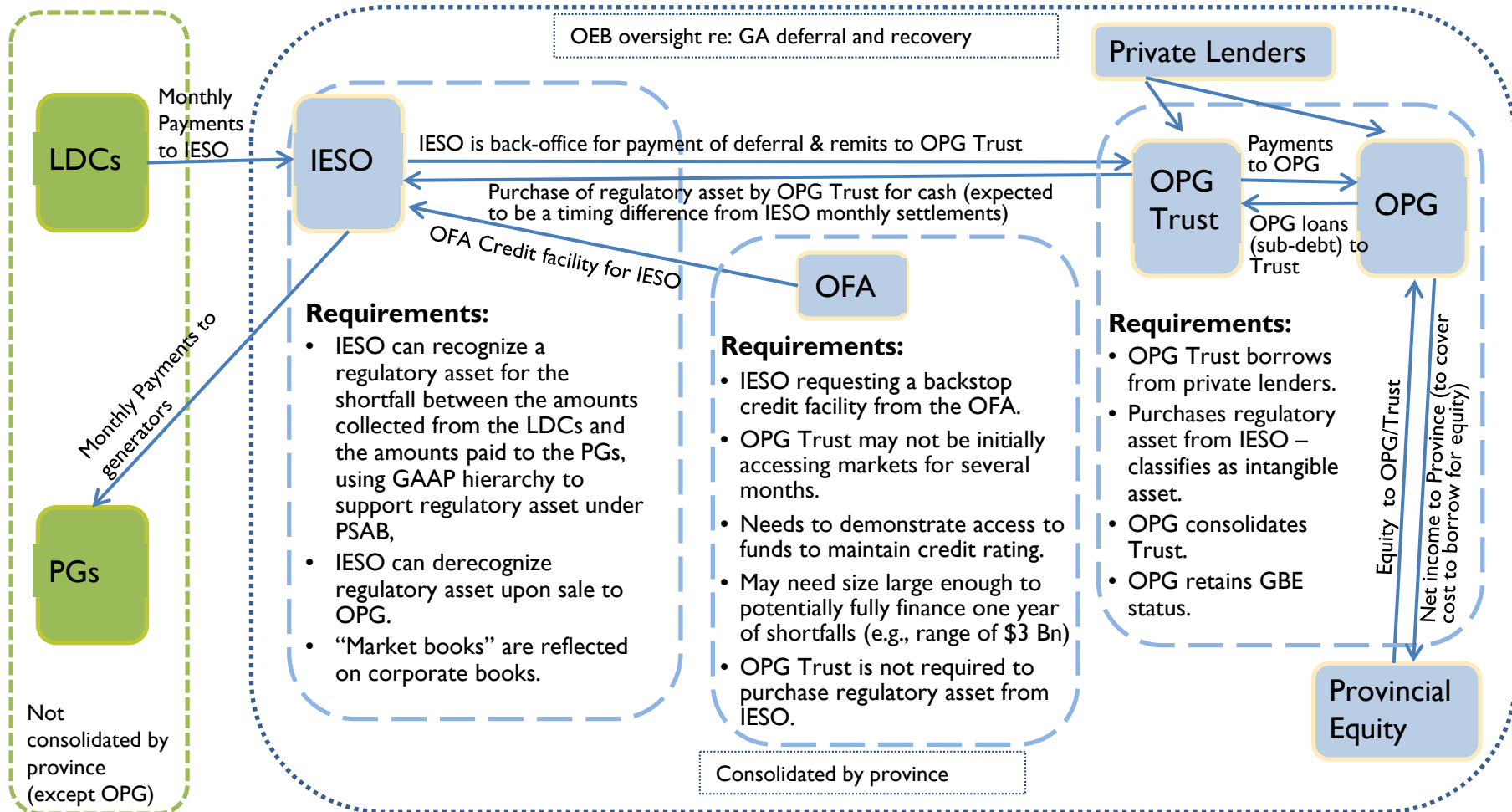
Tel: 416-325-1489
Email: bruno.amara@ofina.on.ca

GA Financing Plan: Role of IESO

Corporate and Electricity Finance Division
May 1, 2017

GA Smoothing – Proposed Structure

- The following diagram provides an overview of the proposed GA smoothing structure, as well as interactions between sector entities and elements required to meet accounting objectives.



▶ **Note:** Proposed structure is subject to legal and accounting confirmation, absent that confirmation, there would be a fiscal impact to the province.

IESO Financing Requirements

- IESO will need to ensure that it continues to have the funds available to provide payments to generators on a monthly basis as part of the IESO settlements process, while recoveries from LDCs for Regulated Price Plan (RPP) / Fair Hydro Plan eligible customers will be lower.
- IESO has an existing credit facility from the OFA; however, a new or expanded facility is being requested. **An Order-in-Council would be needed to facilitate this new OFA-IESO credit facility.**
- IESO would require financing to compensate generators should it be required to hold any portion of the unpurchased Regulatory Asset beyond each monthly settlement period.
 - OPG Trust is not expected to access public capital markets for several months after the start of the FHP, and may be purchasing the asset with a lag vs monthly settlements. Also, OPG Trust is not required to purchase the regulatory asset.
 - IESO will need a credit facility for interim financing.
 - IESO may require longer-term financing to maintain the deferral financing plan, should the OPG Trust not be able to access debt markets on a timely basis for purchase of some or all of the regulatory asset.
- Based on Ministry of Energy's GA deferral plan, it is estimated that approximately \$2.5-3.0 billion need to be deferred per year for over first 10 years, equal to approximately \$200-250 million per month, on average.¹
 - The size of the credit facility required to backstop IESO could be \$2.5 to \$3.0 billion. [TBC]
- There could be a fiscal impact and accounting risk on OFA financing of the IESO requirements if it were to be more than temporary borrowing to cover timing differences on when the OPG SPV buys the regulatory asset vs the timing of IESO monthly settlements.
 - Even if IESO is allowed to recognize the Regulatory Asset, on consolidation into Public Accounts, the regulatory asset would not be expected to be recognised, so that the deferral amount and associated financing costs would be expected to have a fiscal impact.
- The monthly and annual amount being deferred and the resulting monthly amounts can be substantially different than forecast based on various factors, such as seasonality or electricity usage, as well as potential changes to electricity costs from OEB rate decisions, with IESO estimating deferral amounts as high as \$400 million per month.
- Other factors that may increase IESO's financing requirements:
 - IESO will also incur financing charges that will need to be refinanced.
 - The financing and administration costs that OPG Trust incurs will need to be paid.

¹ Based on Ministry of Energy's annual GA deferral amounts, assuming the monthly deferral is equally-weighted.

From: [Anthony Martinello](#)
To: [Kim Marshall](#); [Ronald Kwan](#); [Michael Boll](#); [Mike Manning](#); [Ken Kandeepan](#); [Victor Buza](#)
Subject: OFA : IESO - Fair Hydro funding call April 28
Date: Wednesday, April 26, 2017 11:05:49 AM

Proposed Agenda for Friday's discussions:

1.

IESO's need to have \$ commitment for funding Fair Hydro shortfalls – we can discuss the quantum during the call

Background to support the \$ commitment's rationale:

- Fair Hydro plan propose to lower bills for the next 4 years – with no recovery until post 2022;
- OPG has no requirement to purchase from the IESO;
- For any purchases made, OPG may need a timing delay (liquidity, alignment for investors timing etc.) – may be one or two months after IESO settles the Fair Hydro shortfall each month;
- The monthly Fair Hydro amounts will continue to have +/- forecast variance amounts (these are expected to be funded by IESO, same as RPP today) and the OEB will consider these variances for each FH rate setting

2.

The current \$975M OFA-IESO credit facility may be utilized to include the Fair Hydro funding commitment

Background:

- The current \$975M includes a component for today's RPP shortfalls – so this amount can be reduced or transformed into the Fair Hydro commitment;
- Looking for more flexibility on the current minimum 28 day borrowing period,.. if OPG buys from IESO would like IESO to pay down the debt as soon as possible;
- Moody's (IESO rating) will be examining if IESO has sufficient capacities to fund FH;
- Examine material adverse clause to accommodate FH

3.

IESO to examine whether O.Reg 280/14 needs to be updated for Fair Hydro – if so, will need IESO Board and Minister of Finance's approvals;

Regards.

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From: [Anthony Martinello](#)
To: [Kim Marshall](#); [Ronald Kwan](#); [Michael Boll](#); [Mike Manning](#); [Ken Kandeepan](#); [Victor Buza](#)
Subject: OFA : IESO - Fair Hydro funding call
Start: Friday, April 28, 2017 2:00:00 PM
End: Friday, April 28, 2017 3:00:00 PM
Location: Call-in : 416-933-8665, Conference ID: 4157721

Moderator name: Anthony Martinello
Toll-free dial-in number: 1 888-402-9166
Local dial-in number: 416-933-8665
Conference ID: 4157721

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From: [Anthony Martinello](#)
To: [Kim Marshall](#); [Ronald Kwan](#); [Michael Boll](#); [Mike Manning](#); [Ken Kandeepan](#); [Victor Buza](#)
Subject: OFA-IESO, Fair Hydro next steps
Date: Monday, April 24, 2017 5:43:52 PM

As the draft Fair Hydro legislation is closer to being finalized.....the legislation is giving more clarity on the IESO's expected funding needs.

I think we should have another call this week to discuss more concrete action items regarding the IESO's funding needs to pay for the Fair Hydro shortfalls/holding regulatory asset amounts.

Please let me know if any of the following times works, afterwhich I will send out an invite:

1hour meeting either:

April 26 2017 4pm

April 27 2017 11am

April 28 2017 2pm

Regards.

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From: [Anthony Martinello](#)
To: [Kim Marshall](#); [Ronald Kwan](#); [Michael Boll](#); [Mike Manning](#); [Ken Kandeepan](#); [Victor Buza](#)
Subject: OFA-IESO, discussion re Fair Hydro

Moderator name: Anthony Martinello
Toll-free dial-in number: 1 888-402-9166
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From: [Anthony Martinello](#)
To: [Kim Marshall](#); [Ronald Kwan](#); [Michael Boll](#); [Mike Manning](#); [Ken Kandeepan](#); [Victor Buza](#)
Subject: OFA-IESO, discussion re Fair Hydro
Date: Sunday, April 16, 2017 11:55:16 AM

Below are the proposed agenda items for our meeting.

Agenda:

1. Draw Amounts

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- IESO's credit rating agencies (Moody's Aa2, and DBRS) will examine IESO's credit capacities/solvency – need to update IESO/OFA's credit facilities to remove material adverse effect clauses or similar clauses and acknowledge/agree IESO's role in the Fair Hydro plan and commitment to advance funds under the credit facility if needed for the Fair Hydro cash-flows.

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General comments regarding IESO's Fair Hydro needs vs. IESO regular ongoing needs (corporate and market)

Regards.

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From: [Gadi Mayman](#)
To: [Bonnie Lemcke](#)
Cc: [Ronald Kwan](#)
Subject: RE: (BN) Ontario Forms New Trust to Tap Markets for Hydro Subsidies
Date: Friday, March 03, 2017 3:15:38 PM

The equity raising is a new concept, unless he was referring to the equity that the Province is going to put into OPG>

From: Bonnie Lemcke
Sent: Friday, March 03, 2017 3:11 PM
To: Gadi Mayman <Gadi.Mayman@ofina.on.ca>
Cc: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: FW: (BN) Ontario Forms New Trust to Tap Markets for Hydro Subsidies

[You may not have seen this Bloomberg article.](#)

Ontario Forms New Trust to Tap Markets for Hydro Subsidies
2017-03-02 21:18:47.509 GMT

By Maciej Onoszko

(Bloomberg) -- Ontario Power Generation Inc. will set up a special purpose vehicle that will raise funds to help finance subsidies announced Thursday to curb soaring electricity bills in Canada's most-populous province.

Ontario's largest power generation company will manage the new entity for the province and its electricity system operator, known as IESO. The vehicle will tap bond and possibly equity markets for funding, said Chief Executive Officer Jeff Lyash. "We've got the scale to do this, we have got access to debt markets, relationships with credit rating agencies, we have the internal capabilities," Lyash said by phone on Thursday. "We're basically a service provider -- think about it like a trust."

Ontario's plan includes refinancing investments in power generation over longer periods to reduce electricity costs in the short term. The province plans to push back the cost of the so-called global adjustment, which is a charge that covers the costs the power industry has incurred as part of its multi-billion dollar investment in facilities.

It will probably take a few months to set up the trust as the province needs to create the regulatory framework for the changes, Lyash said, adding the vehicle will be run separate from the rest of OPG's business. He declined to say how much money the entity would raise.

The trust will most likely access the bond market, but it could raise equity too, Lyash said, adding final decisions haven't been made.

The immediate reduction in the global adjustment will

amount to about C\$2.5 billion per year on average over the first 10 years, the province said in a presentation of its proposal on Thursday. The additional financing will add up to C\$1.4 billion a year in interest payments.

To contact the reporter on this story:

Maciej Onoszko in Toronto at monoszko@bloomberg.net

To contact the editors responsible for this story:

David Scanlan at dscanlan@bloomberg.net;

Christopher DeReza at cdereza1@bloomberg.net

Jacqueline Thorpe

From: [Gadi Mayman](#)
To: [Ronald Kwan](#); [Bonnie Lemcke](#)
Subject: RE: (BN) Ontario Forms New Trust to Tap Markets for Hydro Subsidies
Date: Friday, March 03, 2017 3:30:55 PM

I'll talk to Serge.

From: Ronald Kwan
Sent: Friday, March 03, 2017 3:31 PM
To: Gadi Mayman <Gadi.Mayman@ofina.on.ca>; Bonnie Lemcke <Bonnie.Lemcke@ofina.on.ca>
Subject: RE: (BN) Ontario Forms New Trust to Tap Markets for Hydro Subsidies

Agreed. It might be good if someone talked to Jeff (or Serge).

Ron

From: Gadi Mayman
Sent: March-03-17 15:16
To: Bonnie Lemcke <Bonnie.Lemcke@ofina.on.ca>
Cc: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: RE: (BN) Ontario Forms New Trust to Tap Markets for Hydro Subsidies

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To contact the editors responsible for this story:

David Scanlan at dscanlan@bloomberg.net;

Christopher DeReza at cdereza1@bloomberg.net

Jacqueline Thorpe

From: [John Kim](#)
To: [Ronald Kwan](#)
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Date: Tuesday, May 02, 2017 2:46:55 PM
Attachments: [DLEG-847_ID49011_LRC_CBN- Rate Mitigation- Draft- No materials- V4_Markup3.docx](#)
[5 2017-05-09 RAN OPG Business Plan v2_Markup3.doc](#)

Yes, we did.

We don't have a revised version yet but James shared the same FPC deck we have checking in.

Pls. see attached.

John

From: Ronald Kwan
Sent: Tuesday, May 02, 2017 2:43 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: Re: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi John,

Do you have the final markup version we sent on the CBN? And a revised version?

Also, did we get it through TBS?

I'd like to keep the DMO in the loop on this.

Thanks,
Ron

From: John Kim
Sent: May 2, 2017 2:41:09 PM
To: Ronald Kwan
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Fyi, pls. note the CO inquiry.

From: John Kim
Sent: Tuesday, May 02, 2017 2:38 PM
To: James Strang (MOF) <James.Strang@ontario.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

While I don't see why we wouldn't facilitate the request, we would require Minister's authorization

of some sort and staff level, we view that TB/MBC should be made aware of the request/requirement.

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Tuesday, May 02, 2017 2:34 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

CO has a question below. Is this an OFA decision, or is a TB/MBC decision needed?

From: Hindmarch-Watson, Tim (CAB)
Sent: May 2, 2017 1:58 PM
To: Strang, James (TBS)
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Thanks James.

At a few points in the OFA comments they say "The IESO has requested a backstop credit facility from the OFA." Do you know if the plan is to grant this request?

Thanks!

Tim Hindmarch-Watson
416-325-4618

From: Strang, James (TBS)
Sent: May-02-17 12:43 PM
To: Hindmarch-Watson, Tim (CAB)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Tim, just got some feedback from Ontario Financing Authority.

James

From: John Kim [<mailto:John.Kim@ofina.on.ca>]
Sent: May 2, 2017 12:39 PM
To: Strang, James (TBS)
Cc: Bruno Amara
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi James,

I sense we missed the boat and there's new information but see attached comments/edits.

John

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Monday, May 01, 2017 8:51 AM
To: Didem Proulx (MTCU) <Didem.Proulx@ontario.ca>; Helen Graham (MOF)

<Helen.Graham@ontario.ca>; Paul Kaufman (MOHLTC) <Paul.Kaufman@ontario.ca>; Nick Smook (MOF) <Nick.Smook@ontario.ca>; John Kim <John.Kim@ofina.on.ca>

Cc: Felix Fung (MOF) <Felix.Fung@ontario.ca>; Chris Skubel (MGS) <Chris.Skubel@ontario.ca>; Nina Arbabzadeh (EDU) <Nina.Arbabzadeh@ontario.ca>; Patrick Laughton (MOF) <Patrick.Laughton@ontario.ca>; Hosick, Sarah (TBS) <Sarah.Hosick@ontario.ca>; Sandy Luk (MOHLTC) <Sandy.Luk@ontario.ca>

Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Importance: High

Draft note from Cabinet Office. They're looking for feedback by EOD today (May 1).

I'm happy to coordinate any responses.

James

From: Hindmarch-Watson, Tim (CAB)

Sent: April 28, 2017 3:46 PM

To: Fung, Felix (TBS); Skubel, Chris (TBS)

Cc: Strang, James (TBS); Moore, Karen (CAB)

Subject: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Importance: High

Hi Felix and Chris:

As mentioned earlier in the week, please find attached the draft CBN re the rate mitigation legislation for the TBS' review (password same as previous materials). This has been prepared with no materials and should be reviewed closely. I have left comments in the margin where I am looking for specific review or confirmation of particular details. I am interested in ensuring alignment in how we are characterizing the proposal and its risks.

The note is a bit on the longer side at the moment, so suggestions to economize without losing key pieces would also be helpful.

The note is undergoing concurrent review with Energy and my management now. My ADM will likely pass this along to Cindy and Karen for concurrent review given the time crunch, but please feel to pass along as well.

Please try to have any comments to me by EOD on Monday so I can get it to my DM and the Secretary on Tuesday.

Have a great weekend,

Tim Hindmarch-Watson

Policy Advisor

Justice, Resource and Environmental Policy

Policy and Delivery Division

Cabinet Office

416-325-4618

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CABINET BRIEFING NOTE AND LRC RECOMMENDATION

Energy

DRAFT Financing Global Adjustment

Commented [HT1]: Name as in EVista- Will update as item is updated.

Cabinet (info)	TB/MBC	Cabinet	Announcement	TB/MBC	Cabinet	Introduction
Feb 15, 2017	March 1, 2017	March 1, 2017	March 2, 2017	May 9, 2017	May 10, 2017	May 11, 2017

Summary of Proposal

The proposed legislation contains a variance from Cabinet direction, which is detailed in the ministry's variance memo and within this note.

Context for Decision:

This proposal follows Cabinet direction to the Ministry of Energy to take the necessary steps to implement electricity price mitigation initiatives that would provide additional rate relief to Ontario electricity ratepayers.

The proposed legislation enables approaches to fairly allocate the costs of the Global Adjustment (GA) amongst current and future electricity rate payers, and help the most vulnerable Ontarians through enhancements to electricity support programs through ~~tax-base~~ government funding. To fully implement the initiative, the Ministry of Energy will be seeking future approvals for regulations identified in the proposed bill, while working to maintain existing public policy objectives such as: maintaining a reliable electricity system, Ontario's commitment to reducing the impacts of climate change and commitment to achieve greenhouse gas (GHG) reduction targets.

The proposed legislation:

1. Establishes a framework to finance a portion of the GA costs in order to reduce costs for ratepayers in the near term and spread the costs of the GA more fairly across ratepayers between July 1, 2017 and April 30, 2047:
 - July 1, 2017 to April 30, 2018, reduces after-tax electricity costs for specified consumers by 25%.
 - May 1 2018 to April 31, 2022, electricity rates will be set by Order in Council (OIC) with the intention to keep increases in line with the Consumer Price Index (CPI) (See page 17- Fiscal Pressure)
 - May 1, 2022 to April 30, 2047, electricity rates will increase at a pace that ensures recovery of the accumulated debt, interest costs and

Commented [RK2]: 30?

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administrative costs, around 10% of total electricity costs. (See page 14- Future Impacts to Electricity Rates)

Commented [HT3]: TBC by Energy

- Through the bill and subsequent amendments to the *Electricity Act, 1998* and the *Ontario Energy Board Act, 1998*, expanding the powers of Ontario Power Generation (OPG), the Ontario Energy Board (OEB), and the Independent Electricity System Operator (IESO), to provide for appropriate oversight, putting in place appropriate payment, settlement and cost-recovery authorities for and through the IESO (including accommodating payments to and from any appropriate entity) to manage the deferred GA costs. (See page 19- OPG Mechanism)
2. Expands electricity support programs for the most vulnerable consumers and moves program costs from the rate base to the tax base. The bill amends the *Ontario Energy Board Act, 1998* to:
- ~~Mm~~move the recently expanded Ontario Electricity Support Program (OESP) to ~~the tax base~~be government funded, transition the program to be administered by the Crown, and to enable information exchange between the Ontario Disability Support Program to potentially allow for automatic enrolment procedures to be established;
 - ~~Amends the Ontario Energy Board Act, 1998 to enable~~ a broadening of the Rural or Remote Electricity Rate Protection (RRRP), including harmonizing distribution costs for customers with the highest distribution rates and moving the program to be government funded~~the tax base~~; and,
 - ~~Amends the Ontario Energy Board Act, 1998 to~~ require the establishment of a government funded program to provide a delivery credit to prescribed on reserve customers.

Terms you need to know

- **Global Adjustment (GA)** – The GA accounts for the difference between generation costs (contracted and rate-regulated) and the wholesale market price, helping to recover fixed costs, including capital costs, of putting in place and operating Ontario's generation fleet, fixed generation costs, such as renewables, gas and nuclear contracts, as well as the cost of conservation and demand management programs. The GA is instrumental in maintaining a reliable electricity system by ensuring that sufficient generating capacity is available.
- **Local Distribution Companies (LDCs)** – Local electricity utilities, responsible for distributing power from transmission lines to people's homes (e.g., Hydro Ottawa, Toronto Hydro, etc.)
- **Delivery charge** – The costs of getting electricity from generating stations to homes and businesses. Appears as one line on electricity bills, includes three components:

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- Transmission: The costs of moving electricity across high voltage lines from generating stations to the distribution system. This cost is recovered through a variable, per unit charge that is approved by the OEB.
- Distribution: The costs of moving electricity from the transmission system to homes and businesses. Depending on the LDC, distribution costs makes up about 60% to 80% of the Delivery line. This cost is currently recovered through both a variable, per unit charge and a fixed charge, approved by the OEB. Distribution rates are moving to a fully-fixed charge over next 5 years.
- Line Loss: The costs to recover electricity that is lost as heat when it is delivered over a power line.
- **Regulated Price Plan (RPP)** – Since April 2005, the Ontario Energy Board (OEB) has administered an electricity price plan that provides stable and predictable electricity pricing, encourages conservation and ensures the price consumers pay for electricity better reflects the price paid to generators. This pricing plan is known as the Regulated Price Plan (RPP). About 5 million residential consumers, small businesses and farms are eligible for the RPP.
- **Customer classification for Hydro One** – Customer service types are determined by the kind of electricity service as well as by density – how many customers there are in the area and the number of customers per kilometre of line. The more customers there are in the area, the lower the cost to serve. R1 customers are considered 'medium density' customers and R2 are considered 'low density customers.'
- **Ontario Power Generation (OPG)** – A business corporation owned by the ~~p~~PProvince that owns and operates generation assets, including nuclear and hydro, and generates almost half of Ontario's electricity.
- **Ontario Energy Board (OEB)** – A Crown Agency that independently regulates Ontario's electricity and natural gas sectors in the public interest. Implements an open and transparent process to allow for stakeholders to comment on various items.
- **Independent Electricity System Operator (IESO)** – An independent corporation and agency of the Ministry of Energy that operates the electricity market in Ontario. Balances the supply of and demand for electricity in Ontario and then directs its flow across the province's transmission lines, including interties with other jurisdictions.
- **Class A Consumer** – Large commercial and large industrial consumers with average peak load size above 3 MW, subject to eligibility. Class A consumers pay GA based on their electricity consumption during the five highest peak demand hours during the year. On January 1, 2017 the threshold for Class A eligibility was lowered to 1MW for all consumer types. In April 2017, the threshold for Class A eligibility for manufacturing and certain industries, including greenhouses, was lowered to 500 kilowatts.
- **Non-RPP Class B Consumer** – Commercial, institutional and small industrial consumers, typically with load size under 3 MW. Class B consumers pay GA as a

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volumetric rate applied to all electricity consumption. Class B consumers include those Class A eligible that choose not to become Class A.

- **Special Purpose Vehicle (SPV) –**
- **Security Interest –**

Commented [HT4]: TBS: Do you have standard language that you would recommend using?

Why does Ontario need these changes? Why now?

Addressing rising electricity prices is among the highest priorities for Ontarians. There has been increased media attention and public pressure for the government to provide ratepayer relief. On March 2, 2017, the Ontario government announced its electricity rate mitigation package, Ontario's Fair Hydro Plan, which included the initiatives contained in the proposed legislation. The government has committed to implement further rate relief measures by the summer 2017.

What is the expected cost to government?

The total cost of the proposal is \$4.1B [TBC] in 2017/18, \$1,599M funded through the fiscal plan and \$2.5B to be funded through the electricity rate base.

Commented [HT5]: TBC as this includes the equity injection.

Commented [BA6]: Is it clear here what is meant by "cost"? Fiscal cost plus higher debt.

Commented [JK7]: TBS, pls. check this figure. I believe there is an updated figure (\$1,438?).

TABLE 1: Cost Impact (\$M)	2017-18	2018-19	2019-20	2020-21
Moving Social Programs to Government-Funded (details provided in the chart below)	499	753	829	892
GA Financing	2,534	2,668	2,942	3,420
OPG Loan / Province's Capital Injection to OPG Share Purchase (i.e. equity injection ~~or debt~~)	1,100	?	?	?
Cumulative Total	4,133	3,421	3,771	4,312

Commented [BA8]: Maybe should avoid calling this a loan

Commented [RK9]: Should this be just assumed at 44% of the GA deferral amount?

Commented [BA10]: May be confusing to total these amounts. 1st row is a fiscal impact while equity injection represents increase in debt but no fiscal impact.

Commented [JK11]: Also, 2.5bn in 2017-18 includes the Province's capital injection

Commented [HT12]: TBC

Commented [BA13]: Do we need to distinguish between OPG as financial service manager and OPG Trust which would purchase regulatory assets?

The proposed bill identifies OPG as the Financial Services Manager and would therefore take on the risk and responsibility of financing the deferral by purchasing monthly regulatory assets from the IESO through OPG Trust. The OPG would finance these purchases through a combination of an equity investment by the Province (\$1.1 B in 2017-18; See Table 1) and external private sector financing. The structure ~~has been designed to~~ increase gross debt of the Province (to finance the equity injection in OPG), ~~increase interest on debt related to that external debt~~, increase net investment in OPG (so no net debt impact), ~~increase interest on debt related to that external debt~~, and increase earnings of OPG ~~to offset the increase in interest costs~~. ~~The equity investment has been structured so that the underlying regulatory asset will offset the additional debt to not impact the province's net debt.~~

The estimate for the combined impact of the non-Global Adjustment initiatives that would begin in 2017/18 is expected to be \$499M in 2017/18, growing to \$753M in 2018/19 and rising. This represents ~~an~~ additional pressure ~~on that has been incorporated into the 2017 Budget's fiscal~~ plan. These estimates are based on variable inputs such as program uptake and future energy consumption of various consumer groups, and are therefore subject to change.

Commented [BA14]: Additional to? As proposed this is the only pressure on the fiscal plan. The GA financing as proposed has no impact on the fiscal plan but does impact debt.

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TABLE 2: Fiscal Impact (\$M)	17-18	18-19	19-20	20-21
RRRP Enhancements*	344	472	484	497
OESP Enhancements	140	261	325	375
First Nations On-Reserve Delivery Credit	15	20	20	20
Total	499**	753	829	892

*Note: Current regulatory framework calls for RRRP to increase by average distribution rate increase. Forecast assumes 2.6% annually though is subject to OEB proceedings. Fiscal projection is subject to consumer consumption patterns that may change due to extreme weather or other factors. Does not include Algoma Power or Hydro One Remotes, which would continue to be on the rate base.

**Note: Value adjusted from \$665 million to reflect July 2017 implementation.

There is inherent risk in the financial estimates because the calculations are highly dependent on forecasts of the total consumption and bills of customers eligible for the RPP, the cost of borrowing, electricity demand and electricity market conditions and accounting assumptions. In addition, under the proposal, electricity prices would increase around 10% above forecast residential monthly bills from 2028 to 2047. The public may expect that the government is committed to reducing or holding constant the absolute cost of electricity for consumers in the longer term. Under the proposal, the government would not have the ability to direct further changes to the rate of repayment for GA refinancing, which would limit the government's options to address electricity rate concerns in the future. (See page 17- Fiscal Pressure)

What are the key steps to deliver this proposal?

- May 11, 2017 - introduce legislation.
- Spring- Summer 2017- Energy to work with IESO, OEB, OPG, [OFA](#) and LDCs on the implementation of the Fair Hydro Plan.
- Information postings of proposed regulations.
- June ?? 2017- Energy to bring regulations to TB/MBC.
- June ??, 2017- Energy to bring regulations to LRC/Cabinet.
- July 1st, 2017- the remaining Fair Hydro Plan reductions and programs would take effect. Programs that are not established on this day for technical implementation issues will have benefits that are retroactively applied to customers once program is operational in individual LDCs.

Commented [HT15]: Energy: Pelase refine

How will the changes be communicated?

On March 2, 2017, the Premier made a high profile announcement of additional relief to reduce electricity costs for Ontarians. Coinciding with this event, there was news releases with backgrounders, a technical briefing of the media, a public education campaign to raise awareness of the rebates and initiatives in place to reduce electricity bills, and an Ontario website that includes all the programs and initiatives that the government is undertaking to reduce electricity costs.

Commented [HT16]: CO and Energy Comms to review.

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Building on the previous announcements, on May 11, 2017, the Premier is to make a high profile announcement of the plans to introduce the necessary legislation to implement Ontario's Fair Hydro Plan to provide additional relief to reduce electricity costs for Ontarians.

Given the risk identified that the GA financing may have a fiscal impact, communication will need to be clear that the proposed draft legislation meets the legal, accounting and financial requirements to not have a fiscal impact.

Notes and Recommendation from LRC

LRC item direct to Cabinet.

Cabinet Office Analysis

The proposed legislation allows for the implementation of the main elements of Ontario's Fair Hydro Plan (FHP) announced March 2 to provide further rate relief to Ontario electricity ratepayers. The FHP, including the Global Adjustment (GA) smoothing proposal, will provide residential consumers 25% in rate relief on their bills on average in aggregate (including the 8% announced in 2016) for eligible consumers of the Regulated Price Plan (RPP) between July 1, 2017 and April 31, 2018 ("The Fair Adjustment"). Other eligible farm and small business consumers under the Regulated Price Plan (RPP) would also receive a benefit. Electricity rates would then change by amounts prescribed in the regulations under the bill, with the intention to keep rate increases in line with Consumer Price Index (CPI) between May 1, 2018 and April 30, 2022.

Ontario produces and publishes a Long-Term Energy Plan (LTEP) every three to four years, with the next LTEP scheduled for release in the summer of 2017. LTEP principles that will guide decision-making are affordability, reliability, clean energy, community and Indigenous engagement, and conservation. Through extensive consultation with the public, stakeholders and Indigenous partners through the fall of 2016, the Ministry has identified key priorities, and, Ontario's Fair Hydro Plan combined with new policy or program announcements in the LTEP, will provide the comprehensive future planning perspective for Ontario's energy sector.

1. Refinancing the Global Adjustment

The proposed legislation establishes the framework to defer some of the current GA costs to future ratepayers by recognizing the longer term benefit of these assets to the electricity system (similar to extending and re-financing a mortgage). The methodology is based on the assumption that some generation assets are expected to continue to provide benefit to future ratepayers beyond the term of current contracts, and that future ratepayers are expected to continue to be able to utilize and benefit from these assets, and that they will also reduce the need to finance the development of new generation assets in the future.

Commented [AP17]: The 25% is an average or for every customer?

Commented [BA18]: Should sentence read "...25% in rate relief on average..."?

Commented [HT19]: Need to add estimate of benefits from the other programs, particularly RRRP as I think the impact, along with GA, is going to be closer to 40 or 50% for some customers

Commented [HT20]: Confirm with PO and Energy

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Many of the contracted generation assets are expected to have useful lives that extend beyond the term of their current financial contracts (typically 20 years). Similarly, conservation costs are recovered through the GA on an annual basis while conservation initiatives can provide benefits to the electricity system over many years.

According to a legal opinion by former Supreme Court Justice Binnie, the amount that could be financed would need to reflect the true value of the underlying assets being amortized over a longer period of time. Shifting too much of the current GA costs to future generations leaves the process more susceptible to constitutional challenge and could jeopardize the nature of the clean energy adjustment being a regulatory charge, and risk it being deemed an unlawful tax. The bill has been drafted to mitigate this risk and clearly articulates the desire to fairly attribute intergenerational costs and benefits. In addition the bill includes provisions to allow for the balance of the legislation to remain in effect if any particular clause or section is struck down by a court. (See page 16- Legal Risk)

Key elements of this component of the bill include:

Fair Adjustment

- July 1, 2017- April 30, 2018- the bill outlines an immediate 25% reduction (on average) in rates for eligible residential consumers in recognition of the investment in clean energy initiatives since 2005. Other RPP eligible consumers would also receive a benefit.
- May 1, 2018- April 30, 2022- the bill allows for rates to be set by regulation, with the intention that rates will increase in line with CPI over this time, consistent with government commitments. (See page 17- Fiscal Pressure)
- Ontario Energy Board (OEB) would calculate appropriate adjustments for “specified consumers”.

Clean Energy Adjustment

- Determined by Ontario Power Generation (OPG) as the Financial Services Manager, the clean energy adjustment is the amount that will be recovered from consumers in the future to pay principle, interest, transaction costs and administrative costs associated with the fair adjustment (regulatory/investment asset).
- Will be subject to true-up process that will reconcile actual amounts collected with expected amounts.
- May 1, 2022- April 30, 2047- to be invoiced to consumers and collected as part of the electricity bills through existing Independent Electricity System Operator (IESO) and Local Distribution Companies (LDC) processes.
- In accordance with the regulations, the OEB to set the rate at which “specified consumers” are invoiced to recover the clean energy adjustment.

Fair Allocation Amount

Commented [AP21]: OPG intends to recover interest costs every year through the Trust in order to pay the interest payments from debt sourced from the capital markets. Thus, the clean energy adjustment charge would start in 2017, not 2022.

Commented [SQ222]: I had this comment initially too but the opposite side to this is that they will simply capitalize those costs and will result in increased financing requirements over the first 4 years.

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- The fair allocation amount is calculated by the Financial Services Manager consistent with the principles of the bill.
- Established for the purposes of allocating the costs of the clean energy initiative to provide inter-generational fairness to rate payers; and aligning funding obligations that may be incurred during each reference period (typically every 6 months).
- Provided to the Minister of Energy who will ensure that the information is made public in an appropriate way.
- Principles established in the bill require proper match over time between the costs of providing facilities for clean electricity generation and conservation and the consumers who benefit from these investments in the system. (Page 16- Legal Risk; See page 17- Fiscal Pressure)

Financing Plan

- Prepared by the Financial Services Manager to determine if potential funding obligations should be incurred to acquire an investment interest in accordance with the bill.
- Provided to the Minister Energy who may remove the Financial Services Manager if the Financing Plan is not consistent with the principles of the bill and the Financial Services Manager has been given the opportunity to address the Minister's **concerns**.
- May be amended as determined by the Financial Services Manager.
- In practical terms, the Financing Plan is intended to show how debt (with varying degrees of incurrence dates, maturities, interest rates) will be used over time.
- The OEB would review the administrative costs of the Financial Services Manager.

Commented [AP23]: Is this a different point from Ernst & Young advice OPG must have the ability to appoint and remove the Trustee (or Board of Trustees), with no veto right by the Province. No party shall have the ability to remove OPG from its role and authority in the SPV.

Regulatory Asset and Investment Asset

- Regulatory Asset created as IESO incurs a funding shortfall equal to the difference between the rates it receives after the implementation of the Fair Adjustment and the amounts owed under generation and conservation contracts (i.e. the comparison rate minus rates after fair adjustment).
- Subject to OEB approval, IESO would record the funding shortfall as a regulatory asset. ~~as~~ IESO would also have collection rights to recover the funding shortfall, which may be sold. Collection rights are deferred until May 1, 2022.
- The Financing Plan contemplates the Financial Services Manager establishing financing entities (OPG Trust/Special Purpose Vehicle (SPV)) to buy the regulatory asset and the associated rights in exchange for a payment to the IESO. IESO would use the payment to offset the funding shortfall.

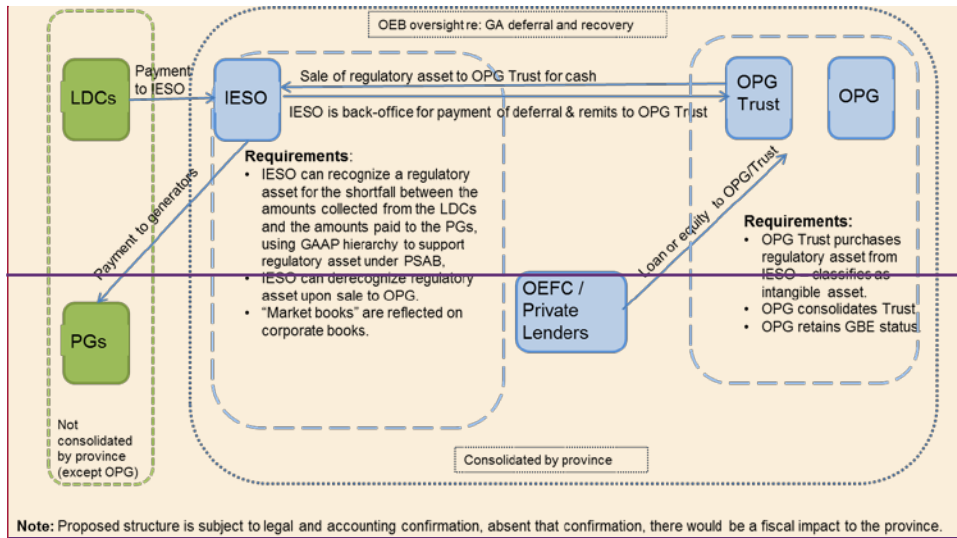
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- This purchase and sale turns the regulatory asset into an investment asset for the investment interest owner. The transfer includes the rights to collect amounts related to the clean energy adjustment in a manner consistent with the bill.
- The investment interest owner may further sell all or a portion of its rights and interests including by dividend or undivided interest, consistent with the Financing Plan. An investment interest owner may also grant a security interest over all or a portion of its right, title and interests to secure a funding obligation.
- After 5 years (May 1, 2022) the IESO has the rights to collect its funding shortfall from ratepayers in the event that a portion of the regulatory asset is not bought and sold. If the regulatory asset is not sold, the IESO would require an alternative source of financing. IESO has requested a credit facility from the Ontario Financing Authority. (See page 17- Fiscal Pressure)
- The rights associated with the investment asset require IESO and LDCs to collect money from rate payers as agent of the investment asset owner.

Crown Undertaking (Guarantee or Backstop)

- The Crown would undertake not to do anything to adversely affect an investment asset or funding obligation, including hinder, impair, prejudice the charging, collection or remittance of the clean energy adjustment.
- The Minister of Energy, with LGIC approval, may enter into agreements for compensation with any person in respect of the bill.
- The Minister of Finance, with LGIC approval, may agree to guarantee and indemnify any debts, obligations, securities or undertakings associated with the investment interest.

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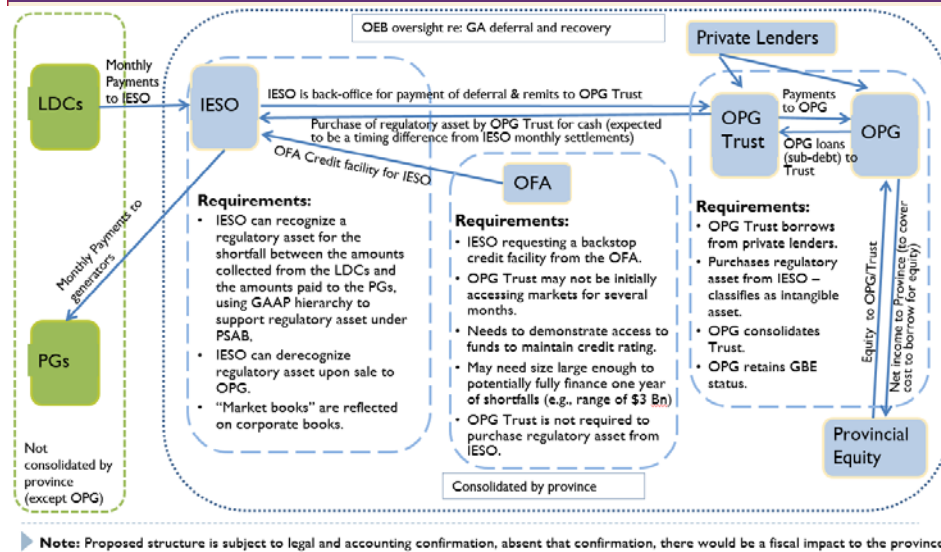


Commented [HT24]: Energy: Please provide updated chart with terminology from the legislation embedded.

Commented [JK25]: CEFD/OFA will have an updated version for this provided to Energy.

Commented [RK26R25]: To show potential OFA financing to IESO.

Also, need to show Provincial equity into OPG (not from OEFC).



The bill establishes a structure in which the IESO records the GA cost recovery deferral ~~is recorded~~ as a regulatory asset (regulated by the OEB), supported at its foundation by the fact that the refinancing of the GA is not a reduction in the GA, but rather a deferral to be collected at a future time ("The Fair Adjustment"). Eligible ~~residential~~ consumers would receive an average 25% reduction in electricity rates from July 1, 2017 to April 30, 2018. Eligible farms and small businesses would also receive a benefit. The IESO may then

Commented [HT27]: Section to be compared against the legislation's compendium when available.

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sell the regulatory asset, at which time it becomes an investment asset. The investment asset owner (OPG Trust/SPV or trust “financing entities”) may then further sell or securitize all or part of the regulatory asset to other parties in exchange for a funding obligation.

Under the proposed framework, OPG, acting in its role as the “Financial Services Manager”, and following the principles in the bill, would regularly calculate the “Fair Allocation Amount” to ensure a proper match of the allocation of the intergenerational costs and benefits. To recoup the costs associated with the fair adjustment, consumers, starting in May 2022 would be invoiced the “Clean Energy Adjustment” on their electricity bills through existing IESO and LDC processes. The OEB would set the rates at which the clean energy adjustment could be collected.

OPG is planning to create a SPV or Trust to finance the GA. The SPV/Trust will be consolidated by OPG, giving OPG the appropriate powers to impact its exposure to variability of the income in the SPV/Trust. The variability will likely largely result from the financing of the SPV/Trust, and therefore OPG will have the ability to direct the financing of the Trust and both benefit from its financing strategy and be at risk as a result of it.

OPG Trust/SPV will ultimately take on the risk and responsibility of financing the deferral through debt financed from OPG and external sources. OPG's debt would be funded through a combination of an equity investment by the Province (See Table 1 on page 4) and external financing through a securitization of the investment asset. The structure would result in increased gross debt of the Province (to finance the equity injection in OPG), increased interest on debt related to that Provincial debt, increased net investment in OPG (to offset the Provincial borrowing for no net debt impact), and increased earnings of OPG (to offset the interest on debt). ~~The proposed structure is expected to result in: (1) increase in provincial gross debt offset by an equivalent in regulatory assets resulting in no change in net debt, and (2) an increase in interest on debt paid by the province offset by higher earnings from OPG resulting in no impact on annual deficit of the province.~~

The legislation commits the government to backstop the financing if the government were to ever hinder the collection of the clean energy adjustment including revoking or changing the legislation or regulations. In other words, the OPG and its debt holders would have their capital guaranteed and paid for directly by the Province if such a situation were to occur. The potential cost to government associated with providing this type of guarantee and the cost of borrowing from private lenders is unknown at this time, but could be as high as \$1-1.5B annually [TBC]. It should be noted that the external borrowing by the OPG Trust will be at a higher interest cost than Provincial borrowing costs, which would affect the carrying costs that would need to be recovered from ratepayers in the future.

The proposed structure has been extensively reviewed by KPMG (Energy advisor and IESO auditor), and the firm has provided an accounting opinion confirming the validity of the structure under PSAB [TBC]. This opinion can be made public [TBC] to support the governments rational for the plan. In addition, MAG and Blakes are confident that the structure is constitutionally sound, but that this will depend on the size of the GA deferral attempted. MAG is confident that the initial fair adjustment is achievable and justifiable, but that this risk increases in the proceeding four years, and may impact the ability to fulfill the commitment to keep increase in line with CPI by this mechanism. Based on the

Commented [SQ228]: Has this been a plan to define? Annually? Semi-annually? Monthly?

Commented [SQ229]: This should be prefaced with the fact that this risk only arises after OPG would have decided to purchase the Regulatory Asset from IESO, which it is not obligated to do so.

Commented [JK30]: In the latest legislative drafting we have seen.

Commented [SQ231]: This is focussed on accounting fiscal impact but cash flow impact is still present. Province would require cash to pay for IOD and unless those higher earnings (re: cash) is dividended back to Province to cover IOD payments, my guess would be that there is a fiscal impact in terms of IOD.

Commented [JK32]: Albeit relatively small compared to the deferred GA amounts.

Commented [HT33]: Based on commentary from implementation meetings. Don't believe this includes estimates of private lender borrowing costs. Please advise

Commented [SQ234]: Furthermore, this would likely be the “additional” impact. The Province's equity injection, which is currently offset by expected higher earnings, would cease to exist resulting in fiscal impact as well. Could result in \$2-3B annually. Please confirm.

Commented [HT35]: Energy to confirm

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current analysis there is a moderately high risk that the GA financing will have a fiscal impact on the Province before 2022.

For clarity: the following structural requirements have been met: [TBC]

Commented [HT36]: TBC based on receipt of professional opinions etc.

- IESO requirements :
 - IESO can recognize a regulatory asset for the shortfall between the amounts collected from the LDCs and the amounts paid to the PGs using GAAP hierarchy to support regulatory asset under PSAB;
 - IESO can derecognize regulatory asset upon sale to OPG;
 - “Market books” are reflected on corporate books; and,
 - OEB to act as regulator.
- OPG requirements:
 - OPG Trust/SPV purchases regulatory asset from IESO – classifies as intangible asset;
 - OPG consolidates Trust/SPV; and
 - OPG retains GBE status.

Commented [SQ237]: Currently, I don't believe this is the case for IESO. Will this be the case going forward?

However, despite the fact that the structure has satisfied the legal, fiscal, and accounting requirements outlined in the policy submission, there remain some fundamental risks that the province would need to accept:

- The structure is unique in Canada and possibly the world, which increases the risk or unknown factors impacting its performance. The use of securities mechanisms to address debt is more common in the United States, but officials are currently unaware of any example that would compare to the size, complexity, or fluidity of what is proposed;
- Complexity of the structure and length of deferral/recovery increases risk and decrease transparency;
- Government would have no ability to control electricity prices resulting from these changes outside of recourse to the fiscal plan;
- Government would not know the price of private borrowing that would be required for the OPG Trust to work and will have limited control over OPG's direct operations as the Financial Services Manager. While removal of the Financial Services Manager is provided for in the bill, in practice this may prove problematic once the system is operational; and
- Private lenders and rating agencies may disagree with the assessment of the size of the Fair Allocation Amount which would increase the risk of the asset and therefore its saleability. Could decrease amount of rate reduction achievable under this mechanism.

2. Enhancing electricity supports for vulnerable Ontarians and shifting costs from rate payer funded to government funded:

Moving the Ontario Electricity Support Program (OESP) to the tax base:

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The OESP is an income-tested, application based program that lowers electricity costs of the most vulnerable consumers by providing a rebate directly on electricity bills. The program was launched in January 2016 and has had roughly 30% enrolment. Consistent with Cabinet direction, the program was recently expanded to increase the existing benefit scales by 50% and provide additional credits to more households.

Under the expanded program the basic OESP benefit scale increased from \$30-\$50 to \$45-\$75 a month and the enhanced OESP benefit scale would increase from \$45-\$75 to \$68-\$113 a month for eligible consumers.

The proposed bill amends the *Ontario Energy Board Act, 1998* to allow for the program to transition from the rate base to the tax base, and become administered by a Ministry or other entity as may be prescribed. The cost to the fiscal plan would be \$186M in 2017/18. The bill provides further amendments designed to allow information sharing between the Ontario Disability Support Program (ODSP) and the entity responsible for OESP. The intention is that this information sharing will allow for the automatic enrolment of individuals that are already enrolled under the ODSP, but it is currently unknown to what extent this will significantly impact the enrolment under the program.

RRRP Enhancement (Delivery Charge Relief):

Currently, RRRP is a \$241.9M program paid for by the ratepayers. For an average residential customer, the cost of supporting RRRP is roughly \$1.58 per month. For other customers, the cost to support the RRRP can range from \$65 for a greenhouse to \$8,000 for a medium industrial. RRRP helps to offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province, including Hydro One R2 customers. The delivery charge includes a distribution cost, which can vary across LDCs, and distribution costs are highest for Hydro One R2 and R1 (medium density) customers.

There are also some LDCs with relatively high distribution costs that, when coupled with high consumption patterns, can result in very high bills for consumers (Northern Ontario Wires, Lakeland Parry Sound, Chapleau, Sioux Lookout, InnPower, Atikokan and Algoma).

In 2016 the OEB made a ruling that all LDCs need to move to fixed distribution charges. The OEB found that fixed distribution charges would establish a fairer way to recover the costs of providing distribution service, and provides greater revenue stability for distributors, which will position them for technological change in the sector, remove any disincentive to promote conservation, and help with their investment planning.

The proposed bill amends the *Ontario Energy Board Act, 1998* to require the creation of a distribution rate protection program and the ability to cap the distribution charges of prescribed distributors. The amendments also establish that this program will be funded by the tax base.

The intention is to draft regulations permitted under this section of the bill to Harmonize the fixed distribution rates to the lowest distribution cost of the LDCs mentioned above

Commented [HT38]: ENERGY: do you have any numbers on this point? Were other programs considered other than ODSP? Can we put something in about continuing efforts to improve the enrolment?

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at \$38/month (which is the forecast rate for Northern Ontario Wires). If the costs of another LDC moved above these in the future, a regulation change would be required to for that LDC to receive RRRP. These enhancements are expected to benefit approximately 800,000 customers in Ontario.

Targeted RRRP consumers would see additional savings on their monthly bill that would vary based on their consumption level and cost to fiscal plan would be \$344M in 2017/18, \$243M of which is a transfer of existing programs to the tax base. If the legislation and required regulations are passed, the program would become active as of July 1, 2017. It is possible that for technical reasons not all LDCs will be able to implement the changes required under the program in time for the July 1 effective date. In these cases, the bill dictates that, once the changes have been made (required by October 1, 2017 at the latest), the LDC would provide a lump sum credit to customers that would otherwise have been eligible for benefits under the program starting July 1st.

Commented [HT39]: Need new estimate of transferred program cost starting from July 1.

On-reserve First Nations Delivery Credit

First Nation and Political-Territorial Organization leaders have advocated for the need for electricity rate relief for on-reserve customers and the review of delivery charges associated with transmission and distribution within the context of historical grievances. In this instance, historic grievances relate to lands affected by energy developments.

The proposed bill amends the *Ontario Energy Board Act, 1998* to require the creation of a tax base funded delivery credit program for on-reserve customers with the details as prescribed in the regulations. The intention is to enact regulations that would eliminate the delivery charge for all on-reserve First Nation household customers and eliminate the monthly service charge for customers of licensed distributors which charge a bundled rate.

Eligible recipients would be automatically enrolled in the program (~21,500 customers) and receive an average monthly benefit of \$85. The program will cost approximately \$20M annually and, provided the legislation and regulations are passed, would become effective July 1, 2017. It is possible that for technical reasons not all LDCs will be able to implement the changes required under the program in time for the July 1 effective date. In these cases, the bill dictates that, once the changes have been made (required by October 1, 2017 at the latest), the LDC would provide a lump sum credit to customers that would otherwise have been eligible for benefits under the program starting July 1st.

Expected Impacts of the Proposal on Electricity bills:

The impact of proposed legislation to an eligible customer's bill in July 2017 is an average 25% decrease (combined with the equivalent amount to the 8% provincial portion of the HST from ORECA effective Jan. 1, 2017) for residential consumers, followed by an increase in price over time. This includes the 8%-rebate for an equivalent amount to the 8% provincial portion of the HST that came into effect on January 1, 2017. Between May 2018 and April 2022 electricity rates will be set by regulation with the intention that rate increases would be kept in line with CPI.

Commented [HT40]: ENERGY: Can you provide analysis on the impact for customers that will receive the RRRP etc?

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Customers that are eligible for the RRRP enhancements and the OESP will see further reductions in their electricity rates beyond the 25%

Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	158	164	167	170	181	178
Total Bill (excludes HST)	140	145	148	150	160	158
Impact of GA Financing		-26	-26	-26	-32	-28
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		117	120	122	125	127
8% rebate		-9	-10	-10	-10	-10
HST		15	16	16	16	17
Revised Bill (includes HST)	158	123	126	128	131	133
Year-over-Year Change		-22%	2%	2%	2%	2%
Change from Forecast		-25%	-25%	-25%	-28%	-25%
Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	162	157	159	170	166
Year-over-Year Change		1%	-3%	1%	7%	-2%
Change from Forecast		-2%	-2%	-2%	-2%	-2%
Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	88	90	84	92	93
Year-over-Year Change		-2%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-4%	-4%	-4%

Notes: Based on IESO's revised OPO forecast as of February 2017. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing.

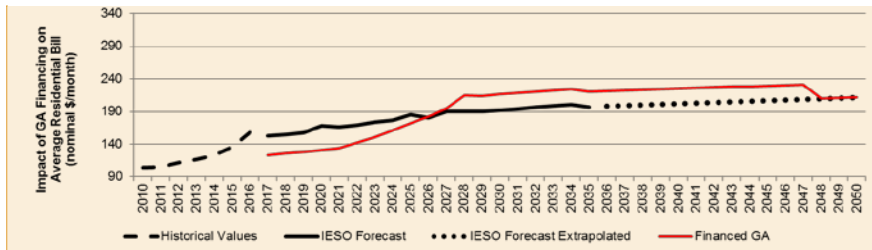
Risks and Considerations:

Future Impacts to Electricity Rates

Borrowing money to defer GA costs for ratepayers would lower costs in the short term but result in substantial debt and higher electricity prices in the future. Based on the GA deferral portion of the plan, electricity prices would increase to about 10% above the actual cost of electricity over the recovery period (peaking at 13%). The proposal may create the expectation that the government is committed to reducing or holding constant the absolute cost of electricity for consumers. Under the proposal, the government would not have the ability to control this portion of electricity rates in the future outside of recourse to the fiscal plan.

Commented [HT41]: Energy to provide updated chart

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Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 such that the average monthly residential electricity bill increases by 6.5% per year with a limit of \$2.2 billion above the true cost of GA in any given year to cap repayment charges at a maximum of 13% of total bill. IESO forecast is based on IESO's revised OPO forecast as of February 2017. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

Commented [HT42]: ENERGY to confirm if this needs to be updated.

The government may be criticized for creating a new debt structure which could be compared to the previous debt retirement charge (DRC). The previous debt retirement charge was removed from residential bills in January 2016 and is scheduled to be removed for remaining customers in April 2018.

Future repayment cost estimates are based on a static assumed interest rate of 5% (actual interest rate may differ), and forecast electricity market conditions and demand levels. Declining demand levels due to conservation, technology adoption, and self-generation would increase the costs borne by remaining customers to decrease the debt associated with GA financing. This would increase the risk that the province would have to absorb some of the debt in the future. To mitigate against the risk that increased self-generation poses, the bill provides that the Clean Energy Adjustment may not be "set-off". In other words, it would exist as a separate and distinct component of the bill that could not be reduced by methods such as net-metering.

Not all generating assets will continue operations at the end of their contract. If the Fair Allocation Amount is not properly designed, future rate payers will be paying the cost for assets that are no longer in use, which would be unconstitutional, unless legislatively authorised as a tax (See page 167- Legal Risk). High capital costs, equipment obsolescence or surplus capacity / low demand conditions mean that some generators will shut down at the end of their contract. Future ratepayers would be paying for these assets that no longer produce power in paying down the deferred GA and accumulated interest costs.

Accounting and Provincial Credit Rating and Borrowing

The significant amount of additional provincial borrowing needed to refinance the GA and associated risks and fiscal costs (interest rates, repayment timelines) could put pressure on the Province's credit rating and overall borrowing capacity.

The complexity of the structure and length of deferral (i.e., recovery of debt) increase the overall risk of the proposal and decrease transparency to the public. The structure of the GA deferral was designed to result in an (1) increase in provincial borrowing (2) no

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increase in net debt, and (3) no impact on annual surplus/deficit. However, depending on funding to OPG/ OPG Trust from the Province, an increase in interest on debt and an increase on income from OPG will result. The structure is also contingent on the size of the GA deferral that is seen as possible, which, as previously mentioned, increases the likelihood of pressures on the fiscal plan in the near future. (See page 17- Fiscal Pressure)

Rating agencies and investors in the Province's debt may view all of the borrowing (whether by the Province directly or the OPG Trust) as an obligation of the Province. Depending on the magnitude of the debt incurred, the Province's borrowing cost may be impacted.

The Ontario Auditor General (OAG) has been briefed on the proposal and has had access to the March 1, 2017 policy submission for the Fair Hydro Plan. While the auditors of OPG and IESO have provided their assessments and the Office of the Provincial Controller Division (OPCD) has been engaged, the OAG has historically raised concern with "rate regulated accounting" and may take this into account when the provincial books are audited (i.e., it may impact whether the OAG qualifies the provincial books).

Based on early assessments, only a maximum of 18% rate relief [TBC] can be justified by amortizing contracts over the useful life of the underlying assets. Reducing electricity rates up to or beyond this amount is dependent on increased borrowing. All of the deferral is dependent on increased borrowing. The 18% referenced here is the limit based on review of the contracts and a Eurig assessment and also includes the rebate for an amount equivalent to the 8% provincial portion of the HST reduction that was already provided.

Commented [HT43]: To be updated when Navigant prelim report and OPG analysis complete

Legal Risk – constitutionality of financing the GA

The current GA amount paid by consumers is a regulatory charge. One of the requirements of a valid regulatory charge (as opposed to a tax) is that the person paying the charge either benefits from the regulatory scheme or causes the need for regulation. In principle, refinancing a portion of the GA to spread the costs of generation and conservation assets over the useful life of the assets presents only a low risk of being a tax, as each cohort of consumers pays for a proportion of the GA cost roughly equal to the proportion of the benefit they receive from the useful life of the assets.

Former Supreme Court Justice Binnie has provided legal analysis of this proposal, stating that the amount that could be financed would need to reflect the true value of the underlying assets being amortized over a longer period of time. Shifting too much of the current GA costs to future generations could jeopardize the nature of this being a regulatory charge.

A proposal for refinancing the GA that appears to cross-subsidize near-term consumers at the expense of long-term consumers by back-loading costs more than if costs were spread equally over the estimated lifespan of generation and conservation assets presents a moderately high risk (more likely than not) of constituting a tax. If the government fails to establish that the relevant electricity generating assets will continue to

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perform economically over the 30 year period, or if the GA charge is in the opinion of the Court disproportionately backend loaded, the GA will not qualify as a regulatory charge (and would be characterized as a tax). Were the charge characterized as a tax, in the event of a challenge, it would be struck down by a court as unconstitutional and consumers would be entitled to recover their payments. This risk could be eliminated, either up front or retroactively, by the imposition of a valid tax.

The degree of constitutional risk is in direct proportion to the extent the government is not able to show a proper match between the cost of providing facilities for electricity generation and the group of consumers who benefit year to year from electricity generated by those facilities. By shifting costs to the 20-30 year customers, the government may in reality be disproportionately back-end loading the GA with the effect that the 20-30 year consumers will be subsidizing the 1-20 year consumers. In short, the bigger the reduction in charges to current consumers, the greater the constitutional risk.

The bill has been drafted to mitigate the constitutional risk of the proposal and clearly articulates the desire to balance the costs and benefits of assets across generations. The bill includes provisions to allow for the balance of the legislation to remain in effect if any particular clause or section is struck down by a court. In addition, external consultant Navigant has provided an interim report on the costs and benefits of the long lived assets which supports the previous conclusions regarding the size of the GA deferral that would be supportable. This is further supported by the conclusions of OPG's independent analysis of the question.

Commented [HT44]: TBC

Commented [HT45]: ENERGY please confirm. Need to clearly articulate any differences that may exist between these analyses

MAG and Blakes are confident that the structure is constitutionally sound, but, as identified above, that this will highly depend on the size of the GA deferral attempted. MAG is confident that the initial fair adjustment is achievable and justifiable, but that this risk increases in the proceeding four years, and may impact the ability to fulfill the commitment to keep increase in line with CPI by this mechanism.

In addition, the structure of the GA refinancing means that the infrastructure included as part of the clean energy adjustment (i.e. amortized over 30 instead of 20 years) will need to be in service over the entire 30 year amortization period or provide benefits to the system in some way over the whole period. In practice this may mean that the government will have limited ability to alter the generation mixture included under the clean energy adjustment, including natural gas generation facilities, which may at some point be seen as inconsistent with the province's commitments to reduce greenhouse gasses. This risk has been mitigated in the bill, by allowing for prescribed natural gas generation contracts to be excluded from the clean energy benefit calculation.

Commented [HT46]: Needs ground truthing

Fiscal Pressure

Commented [HT47]: TBS please review closely

This proposal aligns with the 2017 Budget fiscal plan, but involves significant ongoing risks. The proposal does not include a scheduled review period or an end date, resulting in an ongoing fiscal pressure, which may increase in the out years, and could only be removed by a legislative amendment.

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The cost projections in this proposal are highly sensitive to interest rates and other assumptions:

- The proposal assumes GA refinancing does not have a fiscal impact because the associated legal authority and accounting treatment requirements are met. If the costs of GA refinancing were accounted for as an expense to the fiscal plan, the fiscal impact would be significant.
- The term and timing of the GA refinancing are highly dependent on the IESO's forecast of GA costs and actual interest rates.

The extent of fiscal pressures is also dependent on other factors (i.e., OAG could qualify Ontario's books or issue an adverse opinion). Due to the complexity and size of the proposal, the government has commissioned external opinions on the legal, fiscal, and accounting requirements. Energy's advisor and IESO auditor, KPMG, has provided an accounting opinion that the principles of the structure are sound, and this opinion can be released publicly when desired. This opinion may not change the likelihood of a contrary opinion by the OAG, but does provide a tool for government to point to in justifying its decisions.

Commented [HT48]: TBC

There is also a risk that credit rating agencies and the market may take an alternate view as to the size of the GA deferral that is possible before becoming unconstitutional. If the Fair Adjustment exceeds this analysis, it may increase the perceived risk of the investment asset and therefore its financeability / saleability, which would result in reduced market uptake and reduce the amount of near term rate reduction that would be achievable under the plan. This is why the increases in electricity rates between May 2018 and April 2022 are to be set by regulation as opposed to legislating that they increase by CPI. It may not be possible to legally hold the rate reductions to increase by CPI, and if the government wanted to hold to this commitment, the difference would need to come out of the fiscal plan, which has not been forecasted. Each percentage point of reduction that the structure cannot provide would result in an approximate \$150M [TBC] cost to the tax base. This has not been provided for in the bill, but it is likely that the government will receive questioning along these lines and why the previously committed CPI increases are not explicitly stated in the bill.

Commented [HT49]: Needs ground truthing

Note that if the IESO is not able to sell the regulatory asset (i.e., the OPG SPV is unable to get financing to purchase it), then the IESO would require financing from an alternative source. The IESO has requested a backstop credit facility from the Ontario Financing Authority. This would be associated with a fiscal impact risk.

There may be also some criticism that additional fiscal pressure and risk is being taken to benefit some customers that are not in as much need of rate relief as others (i.e., those that own second homes or cottages).

Legislative Officers

The Ontario Auditor General (OAG) has expressed views on rate regulated accounting, which will likely be raised again upon the announcement of this suite of initiatives. The

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OAG was provided copies of the Cabinet Submission seeking policy approval for Ontario's Fair Hydro Plan and has been briefed by officials from the Ministry of Energy. The OAG will have opportunities to publicly state her views through the Public Accounts committee in the summer of 2018 and in her pre-election report.

The Financial Accountability Officer (FAO) has not been consulted on this proposal and is expected to have an opinion on how this proposal may impact the state of the province's finances.

Commented [HT51]: Energy to update from discussion with FAO

OPG Mechanism

- Accountability
 - o Bill attempts to balance the independence of the OPG trust with regulatory oversight and the market's need for certainty in recovering the GA financing that it provides.
 - o Accountability to the government or the public, amount of government control of the entity, including future rate increases.
- New structure
 - o Structure is complex, involving:
 - IESO as originator of the regulated asset and responsible for flow of funds;
 - OEB as regulator of the new mechanism;
 - OPG responsible for financing and managing the mechanism; and
 - The Province providing ongoing equity capital infusions to OPG and backstop.
 - o Addition of financial agency to current operational obligations of OPG – not the current expertise of OPG. However, OPG has experience managing large financial assets and liabilities through the jointly managed Ontario Nuclear Funds as well as its own pension fund. In addition, could possibly dilute OPG's focus on current high priority responsibilities (i.e., electricity generation and nuclear refurbishment).
 - o This financing structure would be unique to Canada – uniqueness reduces likelihood of all risks being known/mitigated. Highly specialized expertise would be required.
 - o Connection to BPS compensation framework/lack of national comparator.
 - o Unknown transaction, admin, consultant costs. OEB would review OPG's cost as the Financial Services Manager
- Debt
 - o Opportunity for significant shifting of the Ontario's electricity sector over the lifespan of the repayment (30 years). Through sector/policy/government position shifting, possibility of new entity/structure abandoning debt and Ontario having to take a write down.

Commented [HT52]: Needs to be recast given limitation on control after initiated

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- o Risk transfer / portion of debt that Ontario would be responsible for would be the higher risk portion.
- o Repayment plan and impact on rate payers highly dependent on interest rates
- Public perception/reaction (could be seen as similar to the process preparing Hydro One for IPO).

Program Design and Implementation

The proposal relies heavily on LDCs as a partner for implementation. Many of these changes will need to take place simultaneously and amongst the 70 LDCs in Ontario there is variety in size, efficiency and ability to implement change.

- Program design will require an evaluation of whether the existing programs are effective and achieving their outcomes (e.g. the OESP has a current uptake of 30% and program changes are proposed in advance of an increased effort to reach 100% uptake)
- The OESP matrix no longer follows the Low Income Measure (LIM) which creates inconsistencies between how programs are applied and may put pressure other provincial programs to increase funding amounts.

Benefits for all Consumer Classes

The Fair Hydro Plan includes some benefits for all consumer classes as well as targeted benefits to those with the greatest need. It is likely that the government will be criticized for providing benefits to those who may not be in need (e.g., wealthy cottage communities, etc.).

Stakeholder Considerations:

General public (including residential and small businesses) – Likely support a proposal that is projected to provide up to 25% in rate relief (including the 8% announced in 2016) and other targeted relief for vulnerable Ontarians, but likely to question the longer term implications. Some individuals and organizations will perceive the GA smoothing as unduly burdening future generations. Ability of the public to understand current and recent changes will heavily depend on government communications.

Large Industrial and Commercial Consumers – Will continue to be concerned with the impact of cap and trade on electricity prices and the commitment in the Climate Change Action Plan to use GGRA funds to “keep electricity rate affordable”. Will likely respond positively to the recent changes to expand ICI eligibility to some manufacturing and greenhouse Class B customers, but may be more neutral the remainder of the initiatives.

The impact of cap and trade has been added to electricity bills as of January 2017. Class B consumers have raised concerns about the cost of electricity and its impact on their business competitiveness. Although Class A electricity consumers have access to ICI, they are also concerned about the impact of cap and trade on their electricity costs. They are expecting that GGRA funds will be used to mitigate their costs. There is an

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expectation government is going to take specific action to mitigate their increases due to Cap & Trade, and given the initiatives proposed in this submission, there is no plan to provide further relief through the Greenhouse Gas Reduction Account. **Note:** Funding electricity support programs through the tax-base rather than the rate base will provide some saving to both Class A and B consumers.

Tenants – Likely to support any future price mitigation measures that directly benefit them; likely to react negatively if no mitigation measures target them.

Commented [HT53]: Confirm work still ongoing on this piece

Northern communities – Likely to support the targeted RRRP delivery relief.

Indigenous communities – First Nation members who live on reserves are likely to support the proposal because of the targeted delivery relief. Other Indigenous communities (i.e., Métis, non-status, First Nations without reserve land bases) are likely to react negatively at being excluded from the delivery charge relief.

eNGOs – May react negatively towards any price relief that is not directly tied to energy conservation. May criticize the inclusion of natural gas electricity generation as part of the “Clean Energy Adjustment.”

Solar PV sector – May react negatively to price relief as it can be seen to undercut the affordability of distributed renewable generation assets such as solar PV, and undermines the economic arguments behind net metering.

LDCs – Have expressed the need for an additional tool to provide assistance to their customers who are having difficulty with their electricity bills.

Delivery:

If passed, the legislation will enable the price mitigation measures to begin to take effect on July 1, 2017. The 2017 LTEP will be released to the public in the summer 2017 and would reinforce/integrate with Ontario's Fair Hydro Plan. Regulations are required under the major components of the legislation in order to fully implement the initiative and clarify program details.

Commented [HT54]: TBC

1. Refinancing Global Adjustment assets in order to defer ratepayer costs / Mechanism to defer GA costs

Consumers will see an immediate reduction of their electricity bills as of July 1, 2017. The establishment of the regulatory asset and purchase by OPG is expected to take three to six months to implement following the introduction of enabling legislation. The IESO has requested a credit facility from the OFA to provide an interim source of financing.

Commented [HT55]: This needs more elaboration and confirmation. Last discussion I was part of on this point hadn't landed exactly how long it is expected that the IESO retains the Reg Asset for before sale to OPG.

2. Enhancing Social and Conservation Programs

OESP Enhancements

New OESP program details would require TB/MBC approval.

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Changes to regulation will be required to establish and define the parameters for the proposed changes. The financial flow-through mechanism would likely be modelled after processes used for the OREC (8% rebate). The amendments made in this bill allow for a transition period where the program continues to draw on the existing IESO variance account until the account can no longer maintain the program. IESO is required to notify the Ministry of Energy when it expects the variance account to be depleted (likely sometime in the fall). At this time

The proposed changes will take time to implement as they would require changes to the central system and the LDCs' billing systems. The OEB and their central service provider will need to work with LDCs, MOF, and the CRA on the changes to this program (delivery mechanism, funding source, application system, eligibility).

Commented [HT56]: Requires update

RRRP Enhancement

Regulations would be required to establish the details of the program. OEB estimates that the implementation would take at least six months after finalizing regulations. For this reason it is possible that for technical reasons not all LDCs will be able to implement the changes required under the program in time for the July 1 effective date. In these cases, the bill dictates that, once the changes have been made (required by October 1, 2017 at the latest), the LDC would provide a lump sum credit to customers that would otherwise have been eligible for benefits under the program starting July 1st which will put an immediate pressure on the OEB and LDCs as implementation is required no later than October 1, 2017. A mechanism will need to be created to ensure that all parties are aligned in the yearly forecasting and costing of the program.

On-Reserve First Nations Delivery Credit

The OEB would need to work with the LDCs to identify the eligible on-reserve consumers. A communications plan could include public release of the OEB report and a commitment to working with the LDCs on implementation details.

It is possible that for technical reasons not all LDCs will be able to implement the changes required under the program in time for the July 1 effective date. In these cases, the bill dictates that, once the changes have been made (required by October 1, 2017 at the latest), the LDC would provide a lump sum credit to customers that would otherwise have been eligible for benefits under the program starting July 1st.

Once available, the rebate would appear on customer's electricity bills as a reduction in, or credit for, their delivery line.

There is a risk that either non-status Indigenous communities without reserves or Metis could challenge the program on the grounds that it discriminates against them contrary to section 15 of the Charter. This risk is mitigated by the ameliorative purpose of the program and because targeting First Nations communities for a reserve-based program corresponds to the distinct circumstances of reserve-based communities, relative to other Indigenous communities. A genuinely ameliorative program that targets some people but excludes others is shielded from a section 15 challenge if it serves or advances the ameliorative goal.

Linkages:

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Long-Term Energy Plan (LTEP) – Ontario is preparing to release a new LTEP in summer-fall 2017. These plans identify needs for investments over the shorter term, while broadly mapping out the direction of the sector over a 20 year timeframe. The LTEP will balance the principles of affordability, reliability, clean energy, community and Indigenous engagement, as well as conservation and demand management.

Electricity Rate Mitigation Initiatives – The Ontario Rebate for Electricity for Electricity Consumers Act, 2016, (ORECA) put in place an 8% rebate for residential, small business customers and farms beginning January 1, 2017.

The Ontario Clean Energy Benefit (OCEB) was a five-year legislated program put in place as a broad-based ~~(RPP-eligible)~~, transitional measure to a cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. OCEB expired on December 31, 2015.

Commented [RK57]: TBC

Debt Retirement Charge – On January 1, 2016 the government ended the electricity Debt Retirement Charge (DRC) on residential users, earlier than planned, and put in place the low-income targeted OESP, effective 2016. For all other consumers, the Electricity Act was amended so that the DRC is ~~scheduled~~ legislated to be removed by April 1, 2018.

Industrial Conservation Initiative – Ministry of Energy program implemented in January 2011 to help large industrial consumers reduce their electricity costs by ~~shifting~~ reducing electricity consumption ~~away from in~~ peak periods. As part of the Fair Hydro Plan, ICI eligibility was recently expanded to allow for the participation of the manufacturing and greenhouse sectors with an average month peak demand greater than 500 kilowatts (kW) and less than or equal to 1 megawatt (MW). ICI benefits all electricity consumers by decreasing the need for costly peaking generation over the long term.

Affordability Fund – approved as part of Ontario's Fair Hydro Plan, and under development, the Affordability Fund is intended to expand access to conservation funding to targeted consumers that do not currently qualify as low-income for the purposes of the Home Assistance Program (HAP).

Commented [HT58]: insert

Ontario's Climate Change Action Plan (CCAP) – The CCAP, released in summer 2016, reiterated the 2016 Budget commitment and stated that Ontario intends to invest in initiatives that both reduce greenhouse gas (GHG) emissions and ensure that the net impact of cap and trade would not result in an overall increase in electricity costs for commercial and industrial consumers, and that there would be a modest benefit of up to \$2 per month, on average, to residential consumers. This commitment to residential consumers was ~~exceeded met~~ by the January 2017 ~~8%~~ rebate amount equal to the 8% provincial portion of the HST.

The commitment to mitigate the cap and trade impact on electricity costs for commercial and industrial consumers (i.e., Class A and B) has not been fully addressed, though the two recent expansions to the ICI provides for significant potential savings. **Note:** Funding electricity support programs through the tax-base rather than the rate base will also provide saving to Class A and B consumers.

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The CCAP committed to a new Climate Change agency that would act as one window for the delivery of climate change-related programs. The Green Ontario Fund (GreenON)- is tasked to develop programs and services designed to:

- Reduce greenhouse gas emissions from housing from buildings and the production of goods; and
- Increase uptake and overcome market barriers of low-carbon technologies and processes.

The CCAP committed to “consider options for legislation/regulation change that lessen the impact on residential tenants of increased energy costs from cap and trade”. As part of the review of the Residential Tenancies Act, the Ministry of Housing is working on a proposal that will address that commitment. The proposal is expected to come to Cabinet in spring 2017.

Commented [HT59]: To get updated language on the RTA amendments

Proposed Cabinet Minute

Approval of draft bill for introduction

Cabinet approved version **XX-XX** of this draft legislation for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process.



TREASURY BOARD / MANAGEMENT BOARD OF CABINET REQUEST ASSESSMENT NOTE

Ministry:	Energy
Meeting Date:	May 9, 2017
Agenda Class:	Discussion (In Camera)
Last reviewed by: TB/MBC March 24, 2015	Tracking to: Fast Track Cabinet (May 10, 2017)

SUBMISSION TITLE: 2017-2019 Business Plan for Ontario Power Generation

Prepared based on draft submission

I. DECISION BEFORE THE BOARD

- Receive Ontario Power Generation's (OPG) 2017-2019 Business Plan

II. RECOMMENDATIONS:

• Receive the 2016-2018 business plan for Ontario Power Generation	<i>Receive</i>
• Note Minister of Energy will provide concurrence with OPG's Business Plan	<i>Note</i>
• Approval giving special status to OPG under Section 5.3 of the MBC Travel, Meal and Hospitality Expenses Directive, giving it the authority to approve international travel for its employees.	<i>tbd</i>

III. FINANCIAL SUMMARY

\$ Millions	2014-15	2015-16	2016-17
Initiative cost requested	0.0	0.0	0.0
Initiative cost recommended	0.0	0.0	0.0
Recommended program base	0.0	0.0	0.0
Offset Recommended (Specify Ministry/Program)	0.0	0.0	0.0
Total Fiscal Impact	0.0	0.0	0.0

IV. KEY COMMENTS AND CONSIDERATIONS

As stipulated as part of the 2013-14 Results-based Planning process, the Ministry of Energy is submitting OPG's annual business plans for review by Treasury Board to facilitate incorporating implications into the Province's fiscal plan.

It is under the responsibility of the Minister of Energy on whether or not to provide the Minister's concurrence of OPG's annual multi-year business plan. The Treasury Board submission provides the Minister of Energy with an opportunity to highlight why concurrence is being given and any conditions placed on it. Appendix C provides more information on the concurrence process and the 2013-14 minute.

Under the memorandum of agreement (MOA, July 2015) between the Province (as sole shareholder and the Ministry of Energy as representative of the shareholder) and OPG, the company is required to annually submit its board-approved multi-year business plan to the Minister of Energy for concurrence. The concurrence letter from the Minister to the company will note key elements of the business plan,

how these elements relate to the policy direction and priorities of the Province, and the government's expectation for the performance of the company including indicating any elements of the business plan the government does not concur.

In November 2016, OPG submitted its 2017-2019 Business Plan (Board-approved?) to the Ministry.

Ontario's Fair Hydro Plan (OFHP) is not reflected in OPG's latest Business Plan. The Ministry notes the following OFHP implications for OPG:

- As part of supporting the financing and administration of the global adjustment smoothing mechanism, OPG would develop a Special Purpose Vehicle (OPG Trust) which would use 100 per cent debt financing to purchase the right to future cash flows from IESO. It is proposed that the OPG Trust would raise 51% of required funding directly from capital markets while OPG would provide 49% of the financing requirements. The latter would include 44% debt or equity financing from the Province (Estimates provides for a Ministry of Energy operating asset to make an equity injection) with OPG raising the remaining 5% from capital markets, financed by capital infusions from the Province (Equity injection via an operating asset, raised from higher debt, with additional shares to the Province as sole shareholder), and by third-party lending (check with OFA – currently 256.3M common shares increasing to....needed? Perhaps explain why there are shares given province is sole shareholder, linked to value of OPG assets/equity)
 - o Provincial borrowing would be offset by an increase in an investment asset in OPG.
 - o These changes are expected to be fiscally neutral as they would result in an increase in Provincial interest on debt, offset by increases in OPG net income
 - o In addition, the Province's net debt position should remain unchanged (Check is OFA)

Financial figures from the OPG Business Plan are included and supplemented with forecast adjustments for from the Ontario Financing Authority and MOF for OFHP implications as part of Province's finalized fiscal plan for the 2017 Budget and for risks related to the Auditor General recommendation that Ontario include Hydro One and OPG financial information in the consolidated financial statements using the IFRS reporting framework as required by PSAB standards. The Ministry of Energy indicates it is generally supportive of the fiscal, financial and operational strategies laid out in the business plan.

Commented [RK1]: "from"?

Commented [BA2]: Also added MoF changes for IFRS risk

The earnings before tax (net income and income tax payments in lieu – PILs) of OPG are consolidated on the Province's financial statements and have a one-for-one impact on the Province's surplus/deficit position, excluding adjustments that the Province may make upon consolidation of OPG's financials (e.g., unrealized gains or losses in the nuclear funds). OPG is expected to submit its next multi-year business plan later this year for the period starting January 1, 2017.

Overview of Current Business Plan

OPG's 2017-19 Business Plan details key company undertakings such as business transformation and nuclear refurbishment that will have a substantial electricity system benefit, ratepayer and shareholder impacts. These items were flagged in the previous year's multi-year business plan as well.

Key Income Statement Forecasts:

- The figures in the OPG Board approved 2017-2019 Business Plan, along with OFA forecast updates for OFHP (TBC), show a decrease in earnings before tax of \$84M 2949M in 2016-17-18 and \$89M-556M in 2017-18 [with \$75M and \$400M of the declines in 2016-17 and 2017-18 due to IFRS-related consolidation risks], primarily due to estimated impact of Ontario Nuclear Funds Agreement-related IFRS risks, followed by an increase of \$59M-112M in 2018-19 and a decrease of \$141-20M-62M in 2019-20 versus the estimates in the 2016 Budget. The 2019-20 decrease largely reflects an IFRS-

Commented [JK3]: Added to address Ron's comment.

Commented [BA4R3]: Check figures

related consolidation risk of \$200M) as described above.

OPG is forecasting net income attributable to the Shareholder to reach \$1B in 2021, from \$463.6M in 2016. Net income in 2017 is forecast to increase as a result of new regulated rates, a gain on sale of OPG's head office, higher capitalized interest for the Darlington Refurbishment expenditures partially offset by reduced production as a result of planned outages at Sir Adam Beck I and DeCew II hydro stations

Net income in 2018 and 2019, (before OFA and MoF adjustments) is projected ~~planned~~ to increase, primarily due to higher production, and earnings from oncoming stations including Nanticoke solar in 2019. Return-on-equity (ROE) is estimated to increase from 4.2% in 2016 to 7.3% by 2021.

In early January 2017, subsequent to the OPG Board's approval of the 2017-2019 Business Plan, OPG reached an agreement with KingSett Canadian Real Estate Income Fund LP for the purchase of OPG's head office property. The net gain is estimated to be \$285M and will be distributed to the Trillium Trust.

These estimates are highly dependent on electricity and financial market conditions, regulatory decisions by the Ontario Energy Board (OEB), potential changes to accounting standards or the basis of consolidation in Public Accounts, operational performance, and/or government policy, which can change materially. The first table in Appendix G shows the changes to Province's fiscal plan.

- Annual Operations, Maintenance & Administration (OM&A) expenses from ongoing operations are expected to stay consistent over the plan period, averaging \$2.9B per year.
- The cost of OPG generated electricity to customers is projected to remain ~40% below the average non-OPG cost of electricity to 2018, and over ~30% by 2021. Note: OPG provides predominantly, lower-cost baseload generating capability, rather than more expensive peaking generating capability.
- Headcount Efficiencies – Headcount has fallen from 11,686 in 2010 to a forecasted 9,009 in 2016 while GWh per headcount has increased from 7.6 to 9.3.

OPG continues ramping up recruitment in 2017 to fill key vacancies in certain areas (particularly in the nuclear business unit) due to high levels of attrition, as well as continued Pickering operations beyond 2020. OPG is forecasting regular headcount to show a net increase of ~300 by the end of 2017 before gradually decreasing to 4% lower than 2017 levels in 2021.

OPG has hired ~95 Term employees, a new category of non-regular staff negotiated with the Power Workers' Union (PWU) through collective bargaining in 2015. OPG intends to add fewer regular staff in circumstances where they are likely to be laid off as a result of the end of Pickering commercial operations.

• Key Projects:

- The plan assumes ongoing operations at Pickering for about four years beyond 2020, and as approved by Cabinet, the execution of the Darlington refurbishment consistent with approved budget of \$12.8 billion (including escalation and interest), is now under way. First unit refurbishment began in October 2016, Unit 2 is assumed to be returned to service in February 2020 with the second unit refurbishment commencing immediately thereafter and the third unit refurbishment starting in July 2021, assuming necessary concurrence from the Province is obtained.
- Sustaining capital expenditures average \$570M per year include nuclear expenditures unrelated to Darlington refurbishment and costs for continued operation of Pickering

Commented [RK5]: I'd say separate out the differences related to the business plan from the Provincial consolidation adjustment for IFRS.

Commented [BA6]: Edit 463

(e.g., Upgrades at Sir Adam Beck and upgrades to DeCewII, and investments in current and emerging generation technologies including solar and energy storage including construction and operation of the Nanticoke solar facility).

- Rate Application to the OEB:
 - OPG's 2017-19 Business Plan is dependent on the outcome of its rate filing with the OEB for the five-year period from 2017-2021. Oral hearings began February 2017, decision expected in Q3 2017.
 - OPG 2017-2019 BP assumes new rates effective January 1, 2017. The OEB setting a later effective date would negatively impact OPG's 2017-18 fiscal year net income by ~\$50-60M per month of delay.
 - On March 2, 2017 the Province filed an amendment to O.Reg.53/05, which enables OPG to smooth its rates based on OPG's total bill impact, rather than on the basis of nuclear rates only.
 - On March 8, 2017 OPG filed a revised rate smoothing proposal with the OEB, which is expected to decrease the average annual impact on the monthly customer bill for an average consumption of 750 KWh/month from about \$1.05 to 65 cents per month per year
- OPG Request – Special Stats for OPG to Approve International Travel (Appendix F provides more information):
 - OPG has placed a request with the Ministry for authority to approve international travel for its employees. OPG has asked that this application be included with its BP submission to TB/MBC.
 - Section 5.3 of the Management Board of Cabinet's Travel, Meal and Hospitality Expenses Directive allows agencies/organizations, for which international travel may be integral to their business, to seek TB/MBC approval for special status to ensure that the approval process does not have an undue negative effect on its ability to conduct business.
 - OPG cites the importance of enabling its engagement with the international community (in particular in regards to nuclear safety), procurement activities, and investment and due diligence processes for its pension fund and nuclear funds.
 - OPG requires a high level of international business travel at approximately 90-100 trips annually, while Darlington accounts for 45% and is expected see increases.
 - OPG indicated that the approval process, which took 23 days on average in 2016, delays flight bookings which results in higher costs as airlines raise fares closer to the travel date.

Other Key Fiscal Risks:

Regulatory risks: OPG's multi-year rate application to the Ontario Energy Board for the period starting January 1, 2017, is currently in process. Potential OEB decisions providing for lower rates, including disallowance of recovery of OPG's operating costs, current or future deferral and variance account balances (including for the proposed nuclear rate smoothing), future treatment of pension costs.

Accounting risks: Any change in the basis of accounting used for consolidation of OPG results from U.S. GAAP to International Financial Reporting Standards (IFRS) on the Province's financial statements is expected~~could~~ to result in potentially significant fiscal impacts.

Financing Costs: Higher cost public capital market borrowing (vs the Province's borrowing cost for OEFC to lend to OPG) would have a negative fiscal impact.

Name of analyst:	James Strang	Phone number:	7-2071
Date:	May 1, 2017	Log number:	
Branch / Division:	General Government, Planning and Resources Branch, PEM, TBS		

APPENDIX A: PROPOSED MINUTE (UNDER DEVELOPMENT)

Note receipt of a Business Plan for Ontario Power Generation.

In this regard,

- i.) Note the Minister of Energy will provide Ontario Power Generation (OPG) with a concurrence letter for its Business Plan.
- ii.) request for special status...international travel
- iii.) Direct the Ministry, in consultation with the Ministry of Finance / Ontario Financing Authority, to report back to the Board in early January each year with the approved or latest draft business plans for Ontario Power Generation for fiscal planning purposes.

FINANCIAL IMPACTS: CHANGES TO EXPENSE AND REVENUE				TABLE B1
				<i>Appropriations Basis</i>
<i>Fiscal Plan Basis</i>				
\$ Millions		2014-15	2015-16	2016-17
Initiative cost recommended		0.0000	0.0000	0.0000
<i>Expense changes:</i>				
Operating item	Oper	0.0000	0.0000	0.0000
Capital item	Cap	0.0000	0.0000	0.0000
<i>Revenue changes:</i>				
Revenue increase/offset		0.0000	0.0000	0.0000
Revenue decrease		0.0000	0.0000	0.0000
Total Fiscal Impact (draw from c-funds)		0.0000	0.0000	0.0000

APPENDIX C: CONCURRENCE OVERVIEW

Under agreements between the Province (as sole shareholder) and OPG, the company is required to annually submit its multi-year business plan to the Minister of Energy for concurrence. Review of the business plan by Treasury Board prior to concurrence was stipulated as part of the 2013-14 Results-based Planning process (see below).

Concurrence is typically provided to OPG via a letter from the Minister of Energy. The letter will note key elements of the business plan, how these elements relate to the policy direction and priorities of the Province, and the government's expectation for the performance of the company. The letter may also indicate any elements of the business plan of which the government does not concur and/or provide additional guidance on expectations going forward.

The current submission looks at the multi-year business plan for OPG covering 2016-2018. Concurrence with the plan is still pending.

Below is the 2013-14 Results-based Plan Minute:

Directed the Ministry of Energy and its agencies, Ontario Power Generation Inc. and Hydro One Inc., in consultation with the Ontario Financing Authority, to report back:

- o Annually each autumn with the respective multi-year business plans of the agencies as approved by the Boards of the companies, for review by Treasury Board/Management Board of Cabinet.
 - In this regard, the report should include the following, on a calendar and government fiscal year basis:
 - Multi-year financial and operational targets, including net income and earnings-before-tax.
 - Projected revenues and cash flows to the Province, including the Ontario Electricity Financial Corporation.
 - Planned financings from the Ontario Electricity Financial Corporation.
- o Quarterly with financial projection updates and progress reports on the agencies' respective business plan targets and any other new developments, initiatives or risks that may have a material fiscal impact on the Province including variance analysis of last quarter and year-to-date against the annual business plan reviewed by Treasury Board/Management Board of Cabinet.

APPENDIX D: SUMMARY OF KEY HIGHLIGHTS FROM OPG BUSINESS PLAN

The Ministry indicates OPG financial and ratepayer forecasts show some changes from last year's business plan projections, as reviewed by Treasury Board in September 2016.

This is in part because 2017 net income is forecast to increase as a result of new regulated rates, higher capitalized interest for the Darlington Refurbishment expenditures partially offset by reduced production as a result of planned outages at Sir Adam Beck I and DeCew II hydro stations.

Also, actions taken by the Province and OPG in early 2017 to enable OPG to smooth its rates based on OPG's weighted average hydroelectric and nuclear all-in rates (which approximates total bill impact), rather than on the basis of nuclear base rates only. OPG filed a revised rate smoothing proposal with the OEB, which is expected to decrease the average year-over-year annual impact on the monthly customer bill for an average consumption of 750 KWh/month from about \$1.05 to 65 cents per month per year.

Production and Total Cost of Generation

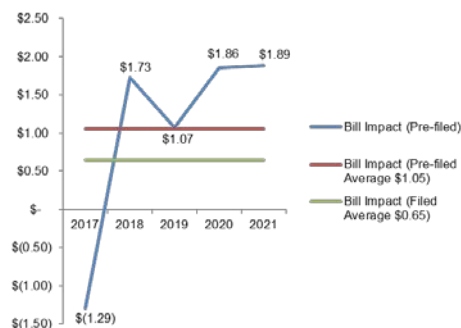
OPG's production is expected to fall to 69.8 TWh by 2021 from 77.6 TWh in 2016. This reflects a declining trend in the Darlington production due to refurbishment outages starting in October 2016 and overlaps between unit refurbishments, as well as, the Pickering Vacuum Building Outage (VBO) in 2021 requiring the shutdown of all units for the duration of the outage.

Total generating cost shows an increasing trend over the planning period relative to 2016, reflecting Lower nuclear production due to Darlington refurbishment outages, increased sustaining capital spending on two large hydroelectric projects (The Lower Mattagami dam safety upgrade and the Sir Adam Beck I GS power canal liner rehabilitation).

Operations, Maintenance and Administration (OM&A) Expenses

Annual OM&A expenses (excluding Darlington refurbishment OM&A) from ongoing operations are expected to stay consistent over the plan period, averaging \$2.9B per year. Increases related to changes in nuclear outage scope at Darlington and planned hiring to fill staffing gaps, and enabling Pickering continued operations, offset by declining pension related costs, due to projected pension asset returns, increases employee contributions, and new method for determining interest components of pension costs.

**Comparison of Annual Bill Impact
(\$/Month per year)**

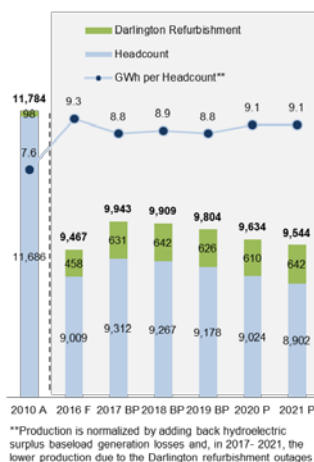


Business Transformation and Labour Costs

As part of a company-wide business transformation, OPG saved over \$1B in costs from January 2011 to December 2016:

- Headcount has fallen from 11,686 in 2010 to a forecasted 9,009 in 2016 while GWh per headcount has increased from 7.6 to 9.3.
- OPG continues recruitment in 2017 to fill key vacancies in certain areas (particularly in the Nuclear business unit) due to high levels of attrition, as well as continued Pickering operations beyond 2020
 - OPG is forecasting regular headcount to show a net increase of ~300 by the end of 2017 before gradually decreasing to 4% lower than 2017 levels in 2021
 - To date in 2017, OPG has hired ~95 Term employees, a new category of non-regular staff negotiated with the Power Workers' Union (PWU) through collective bargaining in 2015
 - o Intention is to add fewer regular staff in circumstances where they are likely to be laid off as a result of the end of Pickering commercial operations, per the terms of the collective agreement

Ongoing Operations Regular Headcount and Productivity

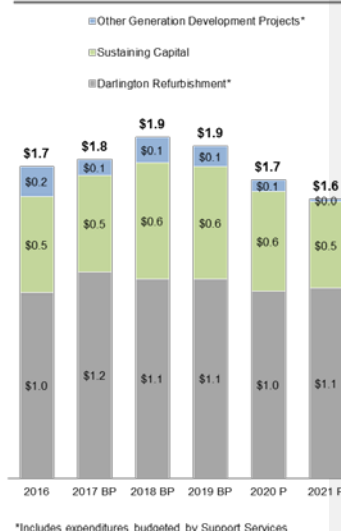


Projects and Capital Expenditures

OPG continues delivery of major projects over the plan period, including:

- Darlington Refurbishment – Unit 2 is assumed to be returned to service in February 2020 with the second unit refurbishment commencing immediately thereafter and the third unit refurbishment starting in July 2021, requiring concurrence from the Province prior to commencement
- Sustaining Capital – Expenditures average \$570M, including:
 - Nuclear expenditures unrelated to refurbishment at Darlington and costs for continued operation of Pickering
 - Regulated hydro expenditures including upgrades at Sir Adam Beck and upgrades to DeCew II
 - Lower Mattagami upgrades in 2018 and 2019
- Other Generation Development Projects – Investments in current (e.g., hydroelectric) and emerging generation technologies including solar and energy storage including construction and operation of the Nanticoke solar facility by 2019

Capital Expenditure Estimates (\$B)



Sales

The following table summarizes sales recently completed and currently underway (as of April 2017).
The fiscal plan implications of the completed OPG Head Office sale is reflected in the 2017 Budget.
(TBC).

	OPG Head Office	R.L. Hearn Site	Lakeview Site
Current Status	Completed	Agreement Reached	OPG and Infrastructure Ontario are preparing for marketing
Site Description	700 University Ave. and parking garage at 40 Murray St. in Toronto	~33 acres at the R.L. Hearn site in Toronto	~67 acres to be transferred by the purchaser to the City of Mississauga (Municipal Park Lands) and ~110 acres to be developed for mixed uses (Uplands)
Buyer	KingSett Canadian Real Estate Income Fund LP	Studios of America Limited Partner	TBD
Value	Estimated up-front 2017-18 fiscal impact of ~\$375M (includes after-tax gain as well as PILs to OEFC)	TBD	TBD
Other Considerations	N/A	N/A	Negotiations with the City have been lengthy and costs to remediate/prepare site may be significant due to concerns regarding site condition
Timing	The sale closed in April 2017	Anticipated to close in Q3 2017	Marketing is planned to start in April 2017, pending negotiations with the City, with an anticipated closing in 2017

APPENDIX E: PROVINCIAL FISCAL PLAN IMPLICATIONS OF BUSINESS PLANS PROCEEDING – (UNDER DEVELOPMENT)

Ontario Power Generation is a Government Business Enterprises (GBE), and consolidated to the Province's financials on a modified equity basis. The Province's Fiscal Plan reflects the entity as Income from Business Enterprises and Electricity Payments-in-Lieu of Taxes (PILs) (As Revenue only).

Revenue (\$millions)	2016-17	2017-18	2018-19	2019-20
2016 Ontario Budget				
Ontario Power Generation				
Net Income	471	586	673	705
Income Tax	224	159	182	108
2017-2019 OPG Business Plan				
Ontario Power Generation				
Net Income	349	702	678	726
Income Tax	11196	184166	154135	189170
2017 Ontario Budget				
Ontario Power Generation				
Net Income (before IFRS Risk)	379	480	678	726
ONFA-related-IFRS Risk Consolidation Adjustment	(75)	(400)		(200)
GA – OPG Trust Interest Revenue Net Income Impact (assumed, to offset IOD)	17	54	99	153
OPG Head Office*		222		
Net Income	387304	49797	732	825
Income Tax	292	292	2135	2170
OPG Head Office*		74		
Change in GBE Net Income (Between Budgets)				
Ontario Power Generation	(84)(167)	(89)(489)	59	120
Change in GBE Income Tax PILs +/-				
Ontario Power Generation	2(132)	2(67)	2(47)	26
TOTAL OF OPG CHANGES	2(299)	2(556)	212	2182

• Net Income and PILs contributions from OPG Head Office are included in Sales and Rental under Other Non-Tax Revenue in the 2017 Budget.

Commented [RK7]: I thought a small amount (100?) was ultimately included here too -- CHECK

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OPG's fiscal results are also impacted by Other PILs to the Ontario Electricity Financial Corporation (OEFC) and the Province. The following table reflects these others impacts in addition to the latest net income and income tax PILs from OPG's August update.

Table below to be updated – OFA

Revenue (\$millions)	2016-17	2017-18	2018-19	2019-20
2016 Ontario Budget				
Combined Other PILs & Other GRC	342	351	359	
Other PILs (GRC to OEFC, Proxy Property Tax)	213	223	232	
Other GRC (to MOF & Niagara Parks Commission)*	129	128	137	
2017-18 OPG Business Plan				
Combined Other PILs & Other GRC ²	353329	3508	3636	362
Other PILs (GRC to OEFC, Proxy Property Tax) ³	2185	23220	24320	241
Other PILs (GRC to MOF & Niagara Parks Commission)*	135110	11840	1240	121
OPG Monthly Update (August 2016)				
Net Income (including OPG Head Office sale)	361379	702-	678-	726
2017 Budget Adjustments				
ONFA adjustment	8			
OPG Trust Interest Revenue		17	54	99
OPG IFRS consolidation risk reflected in fiscal plan	-75	-400	-	--200
Income Tax PILs to OEFC	9892	166-	135-	170

Source: OPG 2017-2019 Business Plan and further details provided by OPG March 14, 2017. The GRC to MOF & Niagara Parks Commission (NPC) is provided to enable comparison to the 2016-18 Business Plan.
2. Include GRC to OEFC, GRC to MOF and NPC and Proxy Property Tax, provided to TBS by Energy on September 14, 2016.
3. Preliminary 2016-19 Business Plan forecast provided by Energy, January 29, 2016. (Do not add to the Combined Other PILs & Other GRC row, likely due to rounding.)

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From: [John Kim](#)
To: [Ronald Kwan](#)
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Date: Tuesday, May 02, 2017 3:09:05 PM

Great idea Ron....will pass that on.

From: Ronald Kwan
Sent: Tuesday, May 02, 2017 3:08 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: Re: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi John,

I think it might be nice to have in the Minute something like "Note that the IESO has requested a credit facility from the OFA to manage liquidity issues between the time IESO requires financing for monthly settlements to meet the requirements of the FHP, and the time when OPG's SPV purchases the IESO regulatory asset, or as a backstop in the case of the regulatory asset not being purchased for a period of time. Note that the Minister of Finance will provide a directive to the OFA to provide a new or expanded credit facility for this purpose."

Very open to better wording, or jargon tied to the draft legislation terminology.

Ron

From: John Kim
Sent: May 2, 2017 2:46:54 PM
To: Ronald Kwan
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Yes, we did.

We don't have a revised version yet but James shared the same FPC deck we have checking in.

Pls. see attached.

John

From: Ronald Kwan
Sent: Tuesday, May 02, 2017 2:43 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: Re: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi John,

Do you have the final markup version we sent on the CBN? And a revised version?

Also, did we get it through TBS?

I'd like to keep the DMO in the loop on this.

Thanks,
Ron

From: John Kim
Sent: May 2, 2017 2:41:09 PM
To: Ronald Kwan
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Fyi, pls. note the CO inquiry.

From: John Kim
Sent: Tuesday, May 02, 2017 2:38 PM
To: James Strang (MOF) <James.Strang@ontario.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

While I don't see why we wouldn't facilitate the request, we would require Minister's authorization of some sort and staff level, we view that TB/MBC should be made aware of the request/requirement.

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Tuesday, May 02, 2017 2:34 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

CO has a question below. Is this an OFA decision, or is a TB/MBC decision needed?

From: Hindmarch-Watson, Tim (CAB)
Sent: May 2, 2017 1:58 PM
To: Strang, James (TBS)
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Thanks James.

At a few points in the OFA comments they say "The IESO has requested a backstop credit facility from the OFA." Do you know if the plan is to grant this request?

Thanks!

Tim Hindmarch-Watson
416-325-4618

From: Strang, James (TBS)
Sent: May-02-17 12:43 PM
To: Hindmarch-Watson, Tim (CAB)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Tim, just got some feedback from Ontario Financing Authority.

James

From: John Kim [<mailto:John.Kim@ofina.on.ca>]
Sent: May 2, 2017 12:39 PM
To: Strang, James (TBS)
Cc: Bruno Amara
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi James,

I sense we missed the boat and there's new information but see attached comments/edits.

John

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Monday, May 01, 2017 8:51 AM
To: Didem Proulx (MTCU) <Didem.Proulx@ontario.ca>; Helen Graham (MOF) <Helen.Graham@ontario.ca>; Paul Kaufman (MOHLTC) <Paul.Kaufman@ontario.ca>; Nick Smook (MOF) <Nick.Smook@ontario.ca>; John Kim <John.Kim@ofina.on.ca>
Cc: Felix Fung (MOF) <Felix.Fung@ontario.ca>; Chris Skubel (MGS) <Chris.Skubel@ontario.ca>; Nina Arbabzadeh (EDU) <Nina.Arbabzadeh@ontario.ca>; Patrick Laughton (MOF) <Patrick.Laughton@ontario.ca>; Hosick, Sarah (TBS) <Sarah.Hosick@ontario.ca>; Sandy Luk (MOHLTC) <Sandy.Luk@ontario.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Draft note from Cabinet Office. They're looking for feedback by EOD today (May 1).

I'm happy to coordinate any responses.

James

From: Hindmarch-Watson, Tim (CAB)
Sent: April 28, 2017 3:46 PM
To: Fung, Felix (TBS); Skubel, Chris (TBS)
Cc: Strang, James (TBS); Moore, Karen (CAB)
Subject: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Hi Felix and Chris:

As mentioned earlier in the week, please find attached the draft CBN re the rate mitigation legislation for the TBS' review (password same as previous materials). This has been prepared with no materials and should be reviewed closely. I have left comments in the margin where I am looking for specific review or confirmation of particular details. I am interested in ensuring alignment in how we are characterizing the proposal and its risks.

The note is a bit on the longer side at the moment, so suggestions to economize without losing key pieces would also be helpful.

The note is undergoing concurrent review with Energy and my management now. My ADM will likely pass this along to Cindy and Karen for concurrent review given the time crunch, but please feel to pass along as well.

Please try to have any comments to me by EOD on Monday so I can get it to my DM and the Secretary on Tuesday.

Have a great weekend,

Tim Hindmarch-Watson

Policy Advisor

Justice, Resource and Environmental Policy

Policy and Delivery Division

Cabinet Office

416-325-4618

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From: [John Kim](#)
To: [Ronald Kwan](#)
Cc: [Bruno Amara](#); [Gavin He](#); [Salman Qadir](#)
Subject: RE: Energy Models
Date: Tuesday, April 25, 2017 5:59:13 PM
Attachments: [GA - IESO Role and Financing v4.pptx](#)
Sensitivity: Confidential

Hi Ron,

Pls. see attached draft deck. It is meant to be a first draft to get feedback so comments are welcome.

Thanks,

John

From: Ronald Kwan
Sent: Wednesday, April 19, 2017 6:42 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Energy Models
Sensitivity: Confidential

Hi John,

We should also work on a briefing deck for the Minister on the IESO financing ask, and we may as well include the equity injection process too.

The deck should likely include an upfront section to remind the Minister of the proposed structure of the IESO reg asset and OPG purchase of the asset and OPG's planned sources of funds, and the accounting treatment of the IESO and OPG.

That would be context for the potential short term needs and long-term financing ask of the IESO.

The deck should outline considerations and options.

And should the ST and /or LT facilities be better from the OFA or OEFC?

Doesn't need to be long, but the key points should be there.

Thanks,
Ron

From: John Kim
Sent: April-19-17 18:09
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Energy Models
Sensitivity: Confidential

Yes, we will be in touch with them soon. We have done a lot of sensitivities for Energy's model so should be in reasonable shape.

I'm assuming also that TBS Centre of Excellence would bring some expertise of their own.

John

From: Ronald Kwan
Sent: Wednesday, April 19, 2017 6:04 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Energy Models
Sensitivity: Confidential

Hi John,

I think the report back may be on the 9th, but they still seem to be targeting LRC for the 1st and Cabinet on the 3rd, to introduce the legislation on the 4th, so, soon.

Ron

From: John Kim
Sent: April-19-17 18:01
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Energy Models
Sensitivity: Confidential

Hi Ron,

We have looked at the models but we haven't focused on this request yet as we're working to get the Document-related items done today and tomorrow. We will look to focus on this, I'm expecting, starting tomorrow when the BNs, Qs and As and the doc materials are done. This is not to say we haven't looked at the models. We're familiar with Energy's modelling with some added materials. OPG's file, we will need to spend more time on. I'd expect sometime next week we would try to sit down with these guys.

My understanding is that this is related to the report back for the May 9 timeline? I understood that the report back was originally for May 1st but it's been moved to the 9th. Felix wasn't sure if this would be ready in time.

John

From: Ronald Kwan
Sent: Wednesday, April 19, 2017 5:53 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Energy Models
Sensitivity: Confidential

Hi,

How is the review coming along? Would you provide me a status update.

Thanks,
Ron

From: Ronald Kwan
Sent: April-12-17 17:41
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Didem Proulx (EDU) <Didem.Proulx@ontario.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: FW: Energy Models
Importance: High
Sensitivity: Confidential

Hi John, Bruno,

Please review and work with Didem and TBS on this.

Thanks,
Ron

From: Proulx, Didem (TBS) [<mailto:Didem.Proulx@ontario.ca>]
Sent: April-12-17 17:13
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Veinot, Cindy (TBS) <Cindy.Veinot@ontario.ca>; Sophie Liu (TCU) <Sophie.Liu@ontario.ca>; Hosick, Sarah (TBS) <Sarah.Hosick@ontario.ca>
Subject: Energy Models
Importance: High
Sensitivity: Confidential

Hi Ron!

Long time, no see... Hope all is well with you and your family (both at home and at the OFA!)

Ron, today we received two models from Energy re: GA Smoothing. Here is:

The model from the Ministry of Energy

The model from the OPG

I am not sure if you have already received these or not (and my apologies if this is a duplicate arrival in your inbox). Having said that, we wanted to make sure that you and your team had a chance to review these as well. As you know, we have been asked to review the model and the assumptions, do some sensitivity analysis and scenario testing to create a risk based outlook. Hope your team can be partners in the process.

We hope to have a discussion amongst ourselves tomorrow to discuss our early observations and questions. Then the plan is to meet and work with Energy.

Can you please let us know who from your team we should include in these discussion?

Cheers,
Didem

GA Financing Plan: Role of IESO

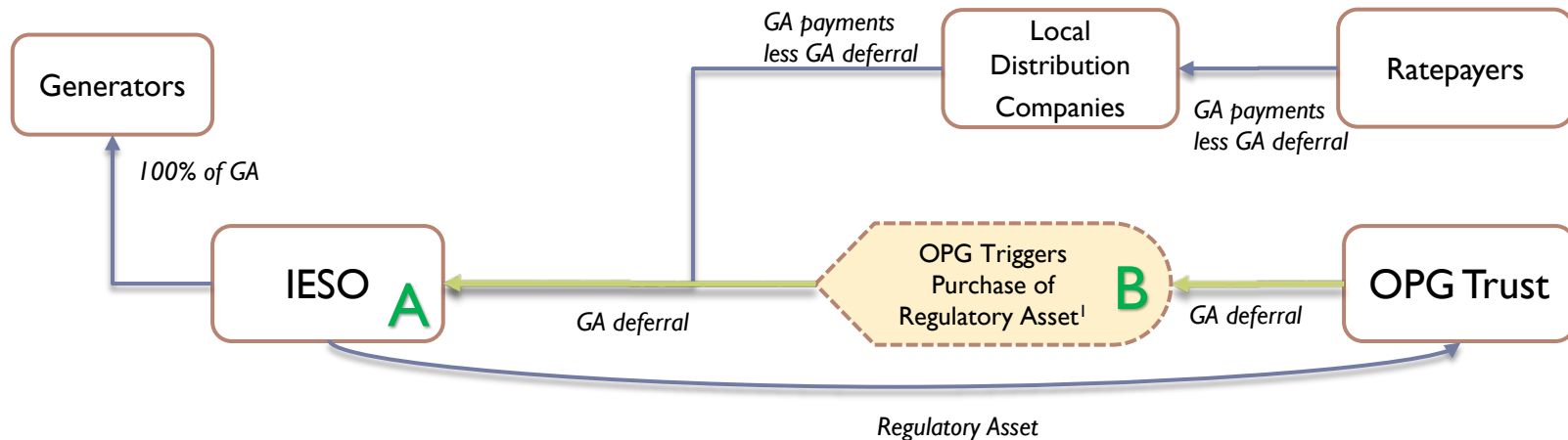
Corporate and Electricity Finance Division
April 25, 2017

Overview

- The IESO ensures that electricity generators are paid to cover the cost of electricity used by ratepayers. A portion of this cost includes the GA.
- The proposed Fair Hydro Act plans to reduce the price paid by ratepayers who fall primarily under the Regulated Price Plan, by 25% for the average ratepayer. To help achieve this savings target, the Act proposes to reduce the GA portion of RPP-eligible ratepayers today by refinancing it over a 30-year period.
 - As ratepayers will be paying a reduced GA amount, IESO will have a shortfall in its payment to the generators. OPG, through a Trust, would purchase the Regulatory Asset (i.e. shortfall).
- Under the current proposal:
 - OPG would create a Special Purpose Vehicle (SPV) referred to as “OPG Trust” or “Financing Entity” which will use 100% debt financing to purchase regulatory assets from the IESO (i.e. the GA amount being deferred)
 - OPG Trust would finance its funding requirements as follows:
 - 51% of its funding requirements through the capital markets as senior debt
 - 49% being provided by OPG as subordinated debt.
 - The 49% subordinated debt from OPG will be financed through debt OPG issues in its own corporate capacity, from the capital markets (5%) and through equity injections from the Province (44%).
 - The Province will finance its equity injection through its annual borrowing program - from issuing debt into the capital markets.
 - The regulatory assets that OPG will purchase represent the portion of GA recoveries deferred to future years. IESO would use the cash from the OPG Trust to make up the shortfall in GA recoveries from ratepayers in order to fully compensate generators.
- OPG Trust would be expected to recover all financing and administrative costs from the ratepayers. Since IESO will be invoicing monthly, OPG Trust may also set up a short-term borrowing facility to accommodate any market timings for its share of debt issuances.

Proposed GA Deferral Structure

- It is understood that the Ontario Energy Board would set the RPP rates lower based on the GA amount being deferred. This would result in IESO creating a variance account which will be offset by IESO selling the shortfall as a Regulatory Asset to OPG Trust.



- OPG, as the Financial Services Manager of OPG Trust, will implement a financing plan. Although it may be expected that OPG Trust will purchase (B) the Regulatory Asset created by IESO every month, OPG is not obligated to do so. This presents a risk for IESO (A) to be able to have sufficient financing available to ensure its generators are paid.
- Current draft legislation does not appear to mandate that OPG Trust must purchase the 100 per cent of the Regulatory Asset every month from IESO, which has resulted in IESO reviewing its existing credit facility with the OFA. (See following slide)
 - The use of the OFA facility likely would represent a fiscal impact to the Province [TBC – Accounting]

¹ Under the proposed Fair Hydro Act, OPG will act as the Financial Services Manager to the OPG Trust to ensure the Financing Plan (i.e. plan to finance the purchase of the Regulatory Assets from IESO) is implemented.

IESO Financing Requirements

- IESO will need to ensure that it continues to have the funds available to compensate generators on a monthly basis.
- The latest draft of the *Fair Hydro Act*¹ proposes that IESO will create a Regulatory Asset (equal to the GA amount being deferred or the “shortfall” as a result of lower payments by ratepayers).
- Under a Financing Plan that would be prepared by OPG as the Financial Services Manager of the OPG Trust, it will purchase these regulator assets.
 - Under current draft legislation, OPG/OPG Trust will not be obligated to purchase the Regulatory Asset from IESO.
- As a result, IESO would potentially require financing to compensate generators should it be required to hold any portion of the unpurchased Regulatory Asset.
- Currently, IESO has the following credit agreements in place with the OEFC or OFA, as of May 1, 2017:
 1. \$975 million revolving line of credit, with the OFA
 2. \$160 million revolving line of credit, with the OEFC
 3. \$120 million non-revolving loan, with the OEFC
- Based on the purposes of the three credit facilities available to IESO, only the first facility (\$975 million) could potentially be used by IESO for temporarily financing their Regulatory Asset.

IESO Existing Credit Facility

- The purpose of the \$975 million revolving credit facility with the OFA is to provide working capital and liquidity for the market transactions IESO is involved in. Any variance as a result of RPP pricing (as a result of GA deferral) can be temporarily be financed by the IESO. This, however, is subject to certain risks outlined later in the deck.
- The current credit limit was approved based on the following requirements from IESO in late 2016:

Financial Obligation	Amt. (\$ M)
1. RPP variance account exposure between RPP rate-setting periods	\$100 - \$325
2. New variance accounts (OESP, RRRP) and liquidity related to the potential Cap and Trade Program	\$15 - \$325
3. Global Adjustment and Overall Market Liquidity and any other timing differences including conservation programs and generation contracts	\$25 - \$325
Total: Short-Term Borrowing Requirements	\$140 - \$975

- The RPP variance account was at a surplus of \$46 million as at August 31, 2016. Over the last three years, the highest RPP shortfall was \$117 million in May 2016.
- The new variance accounts will no longer be needed as the OESP and RRRP is now proposed to be funded through the taxpayer (up to aggregate \$150 million).

IESO Potential Financing and Risk

- Based on Ministry of Energy's GA deferral plan, it is estimated that approximately \$2.5-3.0 billion will need to be deferred per year for over first 10 years.
- Deferring \$2.5-3.0 billion per year results in approximately \$200-250 million per month. This is based on Ministry of Energy's annual GA deferral amounts, assuming the monthly deferral is equally-weighted.
 - The existing \$975 million line of credit with the OFA may be sufficient to cover 1-3 months of GA deferral, assuming it is unused for other reasons and whether its due to OPG electing not to purchase the Regulatory Asset or due to timing differences.
- However, the annual amount being deferred and the resulting monthly amounts can be substantially different based on various factors, such as seasonality or electricity usage.
- Therefore, this monthly number can rise, with IESO estimating as high as \$400 million per month.
- Other factors that may increase the monthly GA deferral amounts:
 - IESO will also incur financing charges that will need to be refinanced.
 - The financing and administration costs that OPG Trust incurs will need to be paid for each month and will not be deferred. The GA amounts Ministry of Energy modelled to be deferred did not include the financing and administration costs. If the ratepayer is paying these costs every month, the GA deferral will need to increase to ensure that the related electricity bill decreases (as a result of the deferral) can reflect the government's proposed 25% electricity rate cut and the increase in bills at the rate of inflation.

Other Risks and Considerations

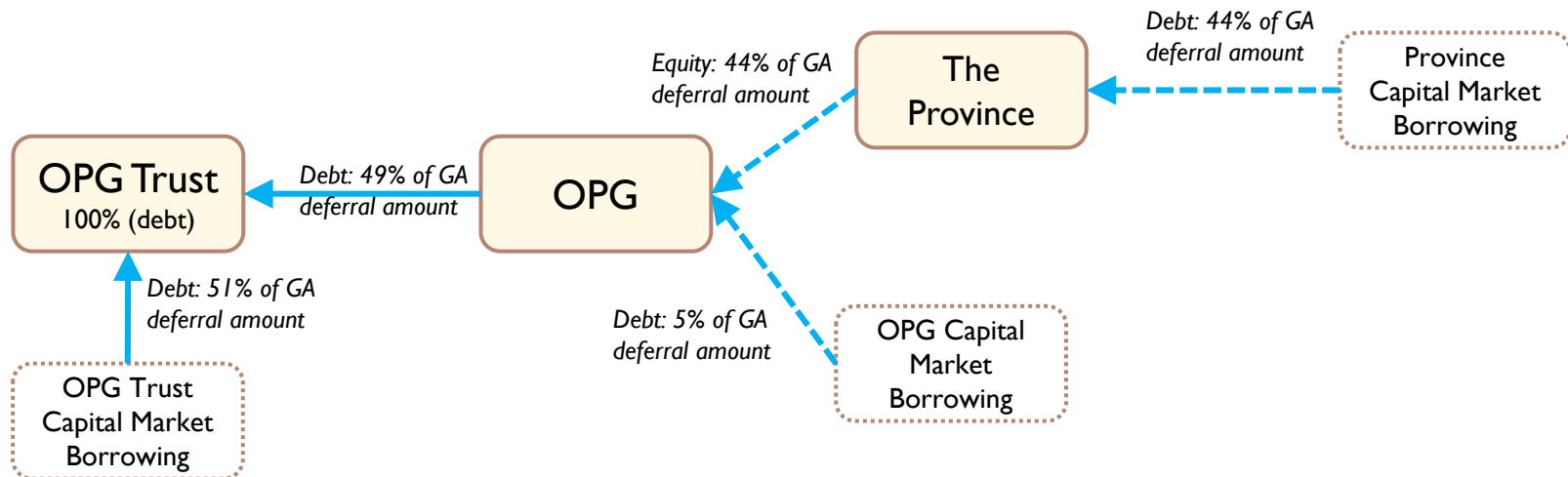
- Even if IESO is allowed to recognize the Regulatory Asset, there is a risk as to whether this recognition will be permitted under the Accounting standards upon consolidation with the Province.
- The current \$975 million line of credit is with the OFA and borrowings under the credit facility are included in the OFA's financial statements, which will result in fiscal exposure to the Province.
 - Even if a credit facility is set up with the OEFC, the same fiscal exposure will be present [TBC].
- The current facility is a short-term facility. Should OPG not purchase the Regulatory Asset, IESO may require long-term financing to either 1) help unwind the asset or 2) maintain the deferral financing plan.
- If the IESO borrowing requirements increase, the Province will be obligated to provide increased support, which would have implications for the overall GA deferral plan.
- Since OPG Trust will be financed with 100% debt from OPG and OPG Trust's capital market borrowings, OPG Trust will be required to pay interest costs. These interest costs will be recovered from the ratepayers immediately and will not be deferred. As currently proposed, OPG will not be obligated to pay the Province any interest costs that the Province incurs since the Province's contribution was an equity contribution.

Other Risks and Considerations ../2

- As an alternative to the Province providing equity injections to OPG, the Province could purchase OPG debt instead.
 - This would result in OPG having increased debt on its books. The GA deferral is expected to be treated outside the capital structure OEB looks at for OPG's rate application.
 - The only requirement as advised by Ernst and Young to OPG is "...that the majority of the debt in the Trust is not more than 44% funded by the Province".
 - This would have no impact on OPG Trust's mandate as OPG Trust is 100% debt financed. Details provided to date do not state otherwise.
- OPG would receive interest income on its contribution to OPG Trust. This would ensure that the Province also receives interest income to cover the interest costs incurred for its contribution to OPG for the GA deferral. Alternatively, OPG may be permitted to keep the interest income which may or may not be used to offset future income back to the Province.
 - Although keeping the interest income in OPG versus distributing back to the Province has no fiscal impact, the Province would need to cover the interest costs, possibly with additional borrowings.

Proposed GA Financing Structure

- OPG Trust would finance 51% of its funding requirements through the capital markets as senior debt with the remaining 49% being provided by OPG as subordinated debt.
 - The 49% subordinated debt from OPG will be financed through debt OPG issues in its own corporate capacity, from the capital markets (5%) and through equity injections into OPG from the Province (44%).
 - The Province will finance its equity injection through its annual borrowing program - from issuing debt into the capital markets.
- OPG Trust would recover all financing and administrative costs from the ratepayers. Since IESO will be invoicing monthly, OPG Trust may also set up a short-term borrowing facility to accommodate any market timings for its share of debt issuances.



From: [John Kim](#)
To: [Ronald Kwan](#)
Cc: [Deena Padamadan](#); [Salman Qadir](#); [Gavin He](#); [Bruno Amara](#)
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx
Date: Tuesday, May 02, 2017 12:34:10 PM
Attachments: [GA - IESO Role and Financing v4 - extract v11_Markup.pptx](#)

Minor edits. Looks good.

John

From: Ronald Kwan
Sent: Tuesday, May 02, 2017 12:11 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Deena Padamadan <Deena.Padamadan@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: Re: GA - IESO Role and Financing v4 - extract v6.pptx

Hi,

I beefed up the fiscal risk bullet.

Ron

From: Ronald Kwan
Sent: May 1, 2017 6:45 PM
To: Bruno Amara
Cc: Deena Padamadan; Salman Qadir; Gavin He; John Kim
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Thanks Bruno. I saved a clean copy.

Ron

From: Bruno Amara
Sent: May-01-17 18:40
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Deena Padamadan <Deena.Padamadan@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>
Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Ron

Looked good to me. I had a couple of minor wording suggestions slide 1 and 2.

Bruno

From: Ronald Kwan

Sent: Monday, May 01, 2017 6:21 PM

To: John Kim <John.Kim@ofina.on.ca>

Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Deena Padamadan <Deena.Padamadan@ofina.on.ca>

Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi John,

How about this?

Ron

From: John Kim

Sent: May-01-17 17:42

To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>

Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Deena Padamadan <Deena.Padamadan@ofina.on.ca>

Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron,

Some edits. As discussed, I am not sure if we can say definitively what OPG Trust is expected to do.

John

From: Ronald Kwan

Sent: Friday, April 28, 2017 3:18 PM

To: Bruno Amara <Bruno.Amara@ofina.on.ca>

Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>

Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Thanks Bruno.

I changed it to Energy's PW.

Ron

From: Bruno Amara

Sent: April-28-17 15:14

To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>

Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>

Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron

We're fine with additional edits. See attached.

Thanks

Bruno

From: Ronald Kwan

Sent: Friday, April 28, 2017 2:53 PM

To: Bruno Amara <Bruno.Amara@ofina.on.ca>

Cc: Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>

Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi,

I made a few more edits.

Ron

From: Ronald Kwan

Sent: April-28-17 14:11

To: Bruno Amara <Bruno.Amara@ofina.on.ca>

Cc: Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>

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Hi Bruno,

I had been thinking, to make it easier for Energy, to simply work with their version of the flow chart from the March CabSub.

That said, their version may have been updated since then anyways, but they could take out suggestions in.

I also added reworked some parts of the text slide, and dropped some detail, as it was rather dense – may still be!

Thanks,

Ron

From: Bruno Amara

Sent: April-28-17 11:28

To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>

Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>

Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron

Attached are the updated slides per you request.

Thanks

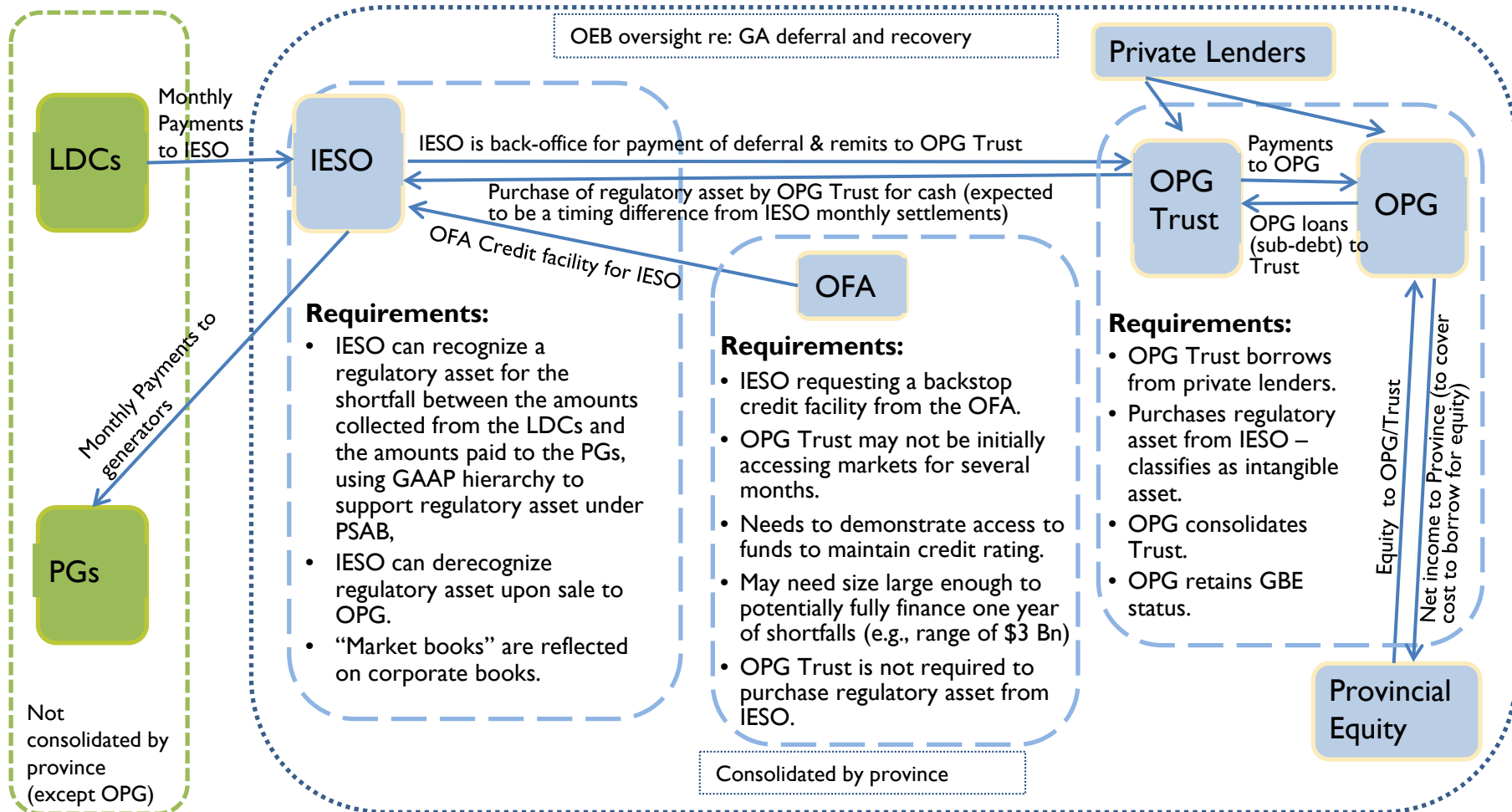
Bruno

GA Financing Plan: Role of IESO

Corporate and Electricity Finance Division
May 1, 2017

GA Smoothing – Proposed Structure

- The following diagram provides an overview of the proposed GA smoothing structure, as well as interactions between sector entities and elements required to meet accounting objectives.



► **Note:** Proposed structure is subject to legal and accounting confirmation, absent that confirmation, there would be a fiscal impact to the province.

IESO Financing Requirements

- IESO will need to ensure that it continues to have the funds available to provide payments to generators on a monthly basis as part of the IESO settlements process, while recoveries from LDCs for Regulated Price Plan (RPP) / Fair Hydro Plan eligible customers will be lower.
- IESO has an existing credit facility from the OFA; however, a new or expanded facility is being requested.
- IESO would require financing to compensate generators should it be required to hold any portion of the unpurchased Regulatory Asset beyond each monthly settlement period.
 - OPG Trust is not expected to access public capital markets for several months after the start of the FHP, and may be purchasing the asset with a lag vs monthly settlements. Also, OPG Trust is not required to purchase the regulatory asset.
 - IESO will need a credit facility for interim financing.
 - IESO may require longer-term financing to maintain the deferral financing plan, should the OPG Trust not be able to access debt markets on a timely basis for purchase of some or all of the regulatory asset.
- Based on Ministry of Energy's GA deferral plan, it is estimated that approximately \$2.5-3.0 billion need to be deferred per year for over first 10 years, equal to approximately \$200-250 million per month, on average.¹
 - The size of the credit facility required to backstop IESO could be \$2.5 to \$3.0 billion. [TBC]
- There **could be** a fiscal impact and accounting risk on OFA financing of the IESO requirements if it were to be more than temporary borrowing to cover timing differences on when the OPG SPV buys the regulatory asset vs the timing of IESO monthly settlements.
 - Even if IESO is allowed to recognize the Regulatory Asset, on consolidation into Public Accounts, the regulatory asset would not be expected to be recognised, so that the deferral amount and associated financing costs would be expected to have a fiscal impact.
- The monthly and annual amount being deferred and the resulting monthly amounts can be substantially different than forecast based on various factors, such as seasonality or electricity usage, as well as potential changes to electricity costs from OEB rate decisions, with IESO estimating deferral amounts as high as \$400 million per month.
- Other factors that may increase IESO's financing requirements:
 - IESO will also incur financing charges that will need to be refinanced.
 - The financing and administration costs that OPG Trust incurs will need to be paid.

¹ Based on Ministry of Energy's annual GA deferral amounts, assuming the monthly deferral is equally-weighted.

From: [Ronald Kwan](#)
To: [Bruno Amara](#)
Cc: [Deena Padamadan](#); [Salman Qadir](#); [Gavin He](#); [John Kim](#)
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx
Date: Monday, May 01, 2017 6:45:13 PM
Attachments: [GA - IESO Role and Financing v4 - extract v10.pptx](#)

Thanks Bruno. I saved a clean copy.

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Sent: May-01-17 18:40
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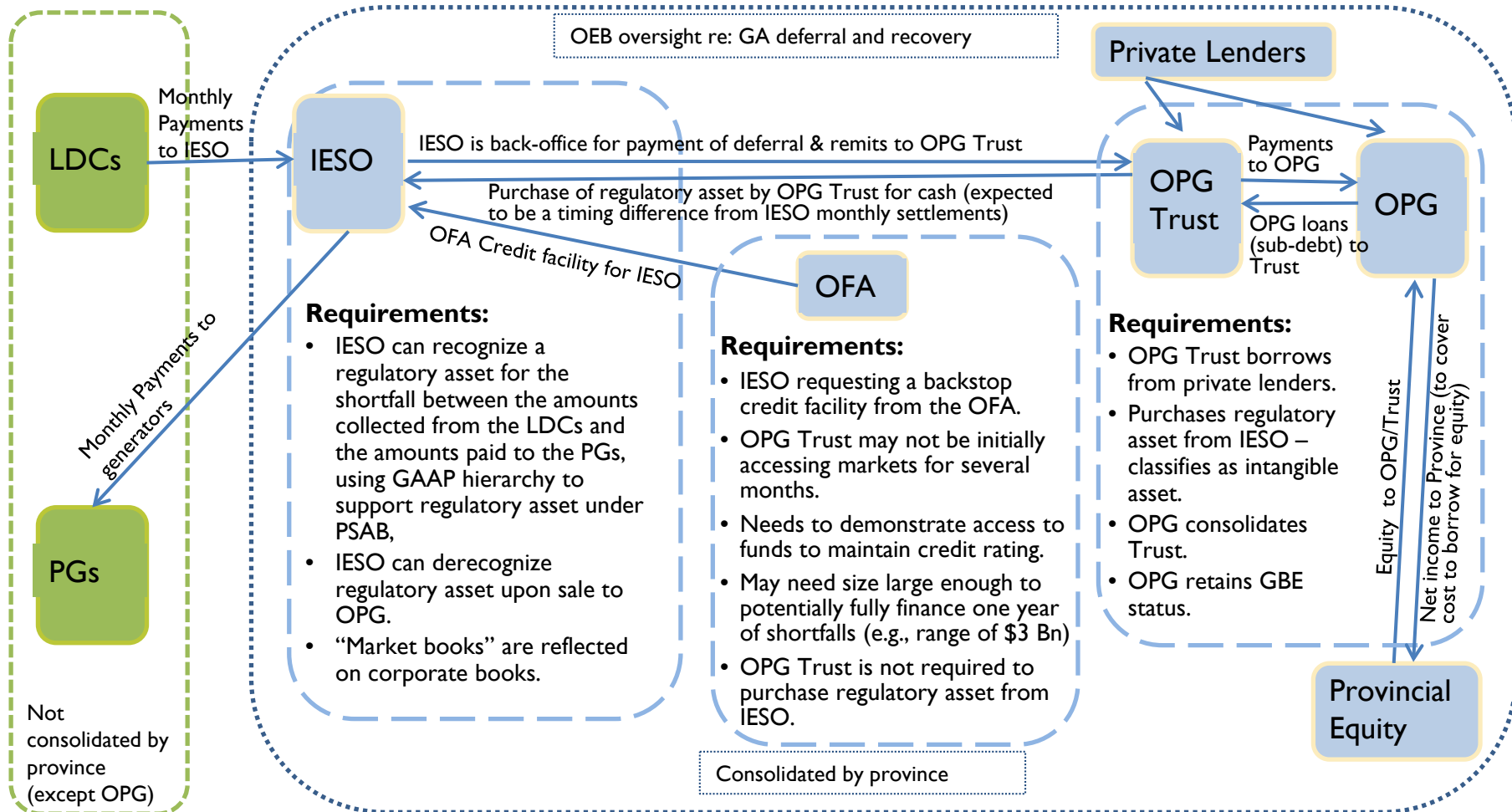
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GA Financing Plan: Role of IESO

Corporate and Electricity Finance Division
May 1, 2017

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¹ Based on Ministry of Energy's annual GA deferral amounts, assuming the monthly deferral is equally-weighted.

From: [Ronald Kwan](#)
To: [John Kim](#)
Cc: [Bruno Amara](#); [Salman Qadir](#); [Gavin He](#); [Deena Padamadan](#)
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx
Date: Monday, May 01, 2017 6:21:07 PM
Attachments: [GA - IESO Role and Financing v4 - extract v9 Markup2.pptx](#)

Hi John,

How about this?

Ron

From: John Kim
Sent: May-01-17 17:42
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Deena Padamadan <Deena.Padamadan@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

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Some edits. As discussed, I am not sure if we can say definitively what OPG Trust is expected to do.

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From: Ronald Kwan
Sent: Friday, April 28, 2017 3:18 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
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Thanks Bruno.

I changed it to Energy's PW.

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Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
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Hi Ron

We're fine with additional edits. See attached.

Thanks

Bruno

From: Ronald Kwan

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Cc: Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>

Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi,

I made a few more edits.

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Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

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Thanks

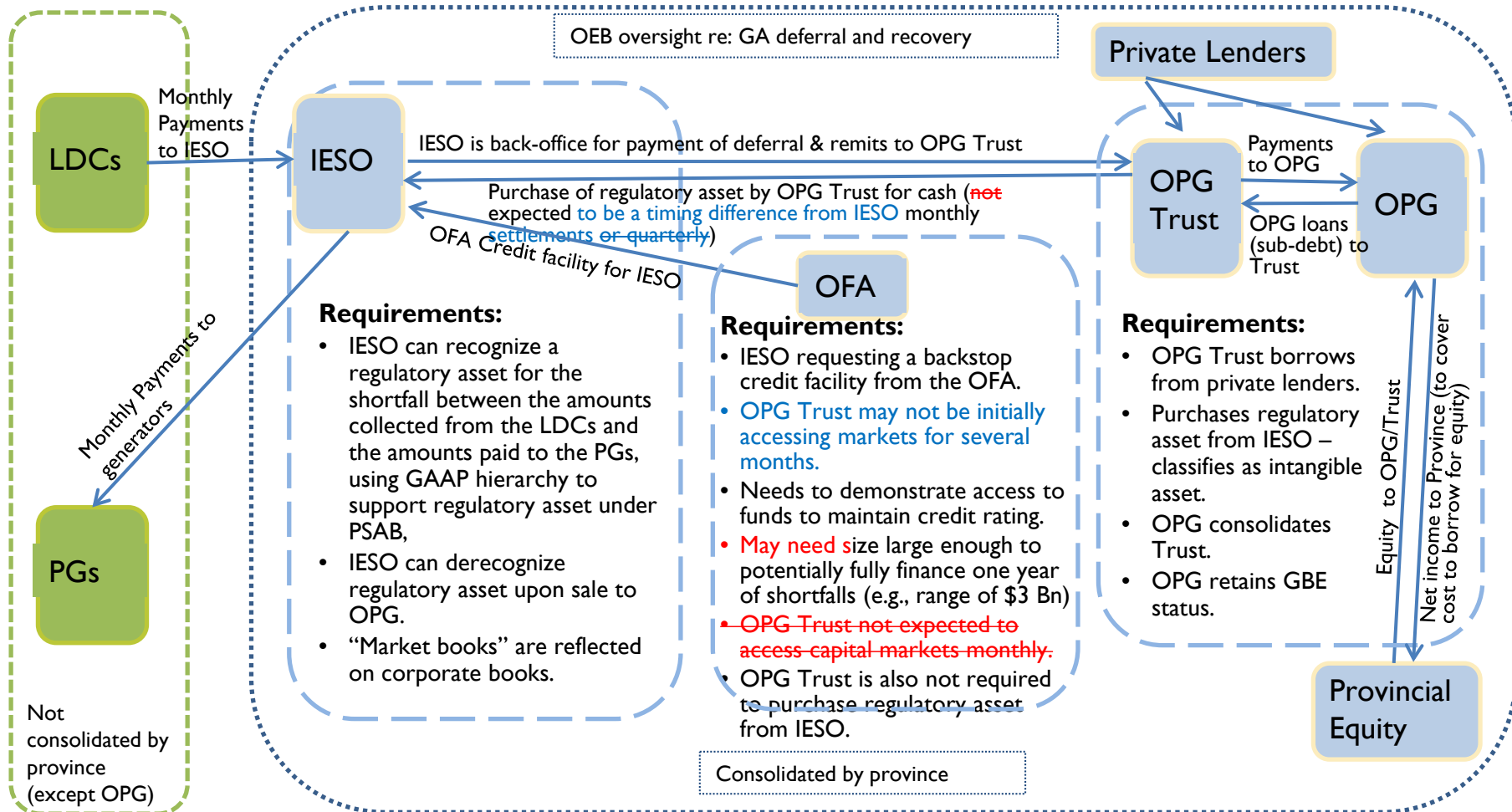
Bruno

GA Financing Plan: Role of IESO

Corporate and Electricity Finance Division
April 28, 2017

GA Smoothing – Proposed Structure

- The following diagram provides an overview of the proposed GA smoothing structure, as well as interactions between sector entities and elements required to meet accounting objectives.



► **Note:** Proposed structure is subject to legal and accounting confirmation, absent that confirmation, there would be a fiscal impact to the province.

IESO Financing Requirements

- IESO will need to ensure that it continues to have the funds available to provide payments to generators on a monthly basis as part of the IESO settlements process, while recoveries from LDCs for Regulated Price Plan (RPP) / Fair Hydro Plan eligible customers will be lower.
- IESO has an existing credit facility from the OFA; however, a new or expanded facility is being requested.
- IESO would require financing to compensate generators should it be required to hold any portion of the unpurchased Regulatory Asset beyond each monthly settlement period.
 - OPG Trust is not expected to [access public capital markets for several months after the start of the FHP, and may be purchasing the asset with a lag vs monthly settlements.](#) Also, nor is it required to purchase the regulatory asset.
 - IESO will need a credit facility for interim financing.
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From: [John Kim](#)
To: [Ronald Kwan](#)
Cc: [Bruno Amara](#); [Salman Qadir](#); [Gavin He](#); [Deena Padamadan](#)
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx
Date: Monday, May 01, 2017 5:41:56 PM
Attachments: [GA - IESO Role and Financing v4 - extract v9 Markup.pptx](#)

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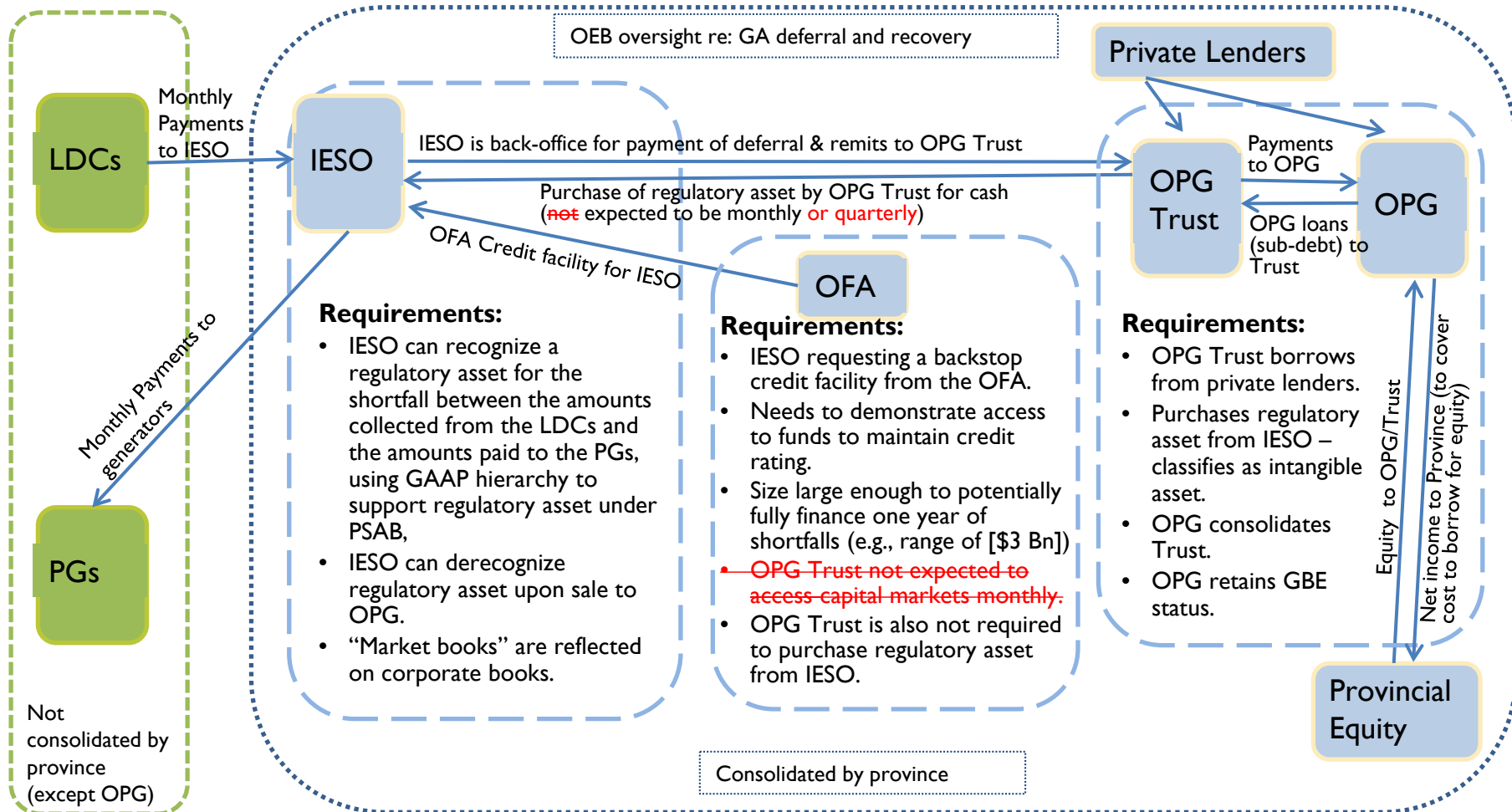
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Corporate and Electricity Finance Division
April 28, 2017

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From: [John Kim](#)
To: [Ronald Kwan](#)
Cc: [Deena Padamadan](#); [Salman Qadir](#); [Gavin He](#); [Bruno Amara](#)
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx
Date: Tuesday, May 02, 2017 2:04:39 PM

Sure, maybe a priority in getting something in too.

John

From: Ronald Kwan
Sent: Tuesday, May 02, 2017 2:00 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Deena Padamadan <Deena.Padamadan@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: Re: GA - IESO Role and Financing v4 - extract v6.pptx

Thanks John. Gadi wanted to be more direct -- though "risk" is still in the sentence. Energy may want to tweak too.

Ron

From: John Kim
Sent: May 2, 2017 12:34:09 PM
To: Ronald Kwan
Cc: Deena Padamadan; Salman Qadir; Gavin He; Bruno Amara
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Minor edits. Looks good.

John

From: Ronald Kwan
Sent: Tuesday, May 02, 2017 12:11 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Deena Padamadan <Deena.Padamadan@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: Re: GA - IESO Role and Financing v4 - extract v6.pptx

Hi,

I beefed up the fiscal risk bullet.

Ron

From: Ronald Kwan
Sent: May 1, 2017 6:45 PM
To: Bruno Amara
Cc: Deena Padamadan; Salman Qadir; Gavin He; John Kim
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Thanks Bruno. I saved a clean copy.

Ron

From: Bruno Amara
Sent: May-01-17 18:40
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Deena Padamadan <Deena.Padamadan@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>
Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Ron

Looked good to me. I had a couple of minor wording suggestions slide 1 and 2.

Bruno

From: Ronald Kwan
Sent: Monday, May 01, 2017 6:21 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Deena Padamadan <Deena.Padamadan@ofina.on.ca>
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Hi Ron

Attached are the updated slides per you request.

Thanks
Bruno

From: [John Kim](#)
To: [Ronald Kwan](#)
Subject: RE: GA Financing / TB Sub
Date: Tuesday, April 25, 2017 8:23:03 PM

Sure, I did convey some of the message. With more to follow.

John

From: Ronald Kwan
Sent: April-25-17 8:02 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: Re: GA Financing / TB Sub

Hi,

I think the facility will need to be enhanced. I heard that the IESO wants a facility size to be able to potentially finance one full year, which could then be in excess of \$3 Bn.

We should also discuss with TB staff the ask.

We can discuss in the morning too.

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On Apr 25, 2017, at 7:57 PM, John Kim <John.Kim@ofina.on.ca> wrote:

Thanks, would the initial set up use be okay under the existing facility? Or could we use the existing or enhanced facility with a new acknowledgement of some sort from our Minister?

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Begin forwarded message:

From: "Montgomery, Kaitlin (MOF)"
<Kaitlin.Montgomery@ontario.ca>
Date: April 25, 2017 at 6:56:34 PM EDT
To: "Kim, John (OFA)" <John.Kim@ofina.on.ca>
Subject: FW: GA Financing / TB Sub

Just wanted to check in – do you anticipate providing anything for the TB submission on the borrowing requirements of IESO? Or not needed? Just want to make sure I'm flagging incoming content to ENE.

Thanks,
Kaitlin

From: Montgomery, Kaitlin (MOF)
Sent: April 24, 2017 10:18 AM
To: Kim, John (OFA) (John.Kim@ofina.on.ca)
Subject: GA Financing / TB Sub

Hey John,

Just following up on our conversation Friday. You had asked about the rationale for certain levels of financing – passing this note along that we just received from OPG. Let me know if you have further questions on this.

Secondly, I'm starting to pull together materials for the TB submission. The first is seeking appropriation for the equity injections, second is any PILs exemptions that the Province is comfortable with. Lastly, Scott thought you guys might also want something built into the submission about increased borrowing requirements of the IESO – would you be able to

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Let me know what you think.

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<Finance Structure_GA_Rationale for 51%.docx>

From: [John Kim](#)
To: [Ronald Kwan](#)
Subject: RE: GA Financing / TB Sub
Date: Tuesday, April 25, 2017 7:57:29 PM

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<Finance Structure_GA_Rationale for 51%.docx>

From: [John Kim](#)
To: [Ronald Kwan](#)
Subject: RE: GA Financing / TB Sub
Date: Wednesday, April 26, 2017 7:42:53 AM

Great, thanks.

John

From: Ronald Kwan
Sent: Wednesday, April 26, 2017 1:03 AM
To: John Kim <John.Kim@ofina.on.ca>
Subject: RE: GA Financing / TB Sub

Hi John,

Just had a chance to flip through your deck. Looks good. I'll try to provide some suggestions on Wednesday.

Ron

From: John Kim
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Subject: GA Financing / TB Sub

Hey John,

Just following up on our conversation Friday. You had asked about the rationale for certain levels of financing – passing this note along that we just received from OPG. Let me know if you have further questions on this.

Secondly, I'm starting to pull together materials for the TB submission. The first is seeking appropriation for the equity injections, second is any PILs exemptions that the Province is comfortable with. Lastly, Scott thought you guys might also want something built into the submission about increased borrowing requirements of the IESO – would you be able to draft something for inclusion in the submission on this (if required)?

Let me know what you think.
Kaitlin

<Finance Structure_GA_Rationale for 51%.docx>

From: [Ronald Kwan](#)
To: [John Kim](#)
Cc: [Tomasz Bugajski](#); [Salman Qadir](#); [Shajee Kathirgamanathan](#)
Subject: RE: IESO 975 facility
Date: Wednesday, October 12, 2016 4:14:41 PM
Attachments: [IESO \(OPA legacy\) LoC Credit Facility Extension - BN v10 Markup.docx](#)

Thanks John for a very comprehensive note. I'm fine with the recommendation.

I mostly moved sections around, in addition to a few other suggested edits.

Ron

From: John Kim
Sent: October-09-16 14:10
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Tomasz Bugajski <Tomasz.Bugajski@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: IESO 975 facility

Hi Ron,

As promised, pls. see attached briefing note summarizing IESO's request and EFB's due diligence on the request.

Based on your feedback, we will work to finalize the package in the coming week.

Thanks,

John.

Y. John Kim
Director(A), Electricity Finance Branch
Corporate & Electricity Finance Division
Ontario Financing Authority
Ph: 416-212-6996
Email: john.kim@ofina.on.ca

IESO (OPA LEGACY) CREDIT FACILITY EXTENSION

The Independent Electricity System Operator (IESO) has requested a three-year extension to December 31, 2019, of the \$975 million revolving credit facility provided by the ~~Province through the~~ Ontario Financing Authority (OFA). To accommodate this request, the OFA requires a new Lending Directive from the Minister of Finance.

- The existing credit facility agreement, which expires on December 31, 2016, was last amended in December 2014 following the amalgamation of the Ontario Power Authority (OPA) and the IESO where the new "IESO" assumed all rights and obligations under the pre-existing OFA-OPA \$975 million credit agreement.
- The IESO has also requested for the drawdowns to be based on the number of days, for a minimum of 28 days and up to a maximum of 95 days. The existing credit facility agreement only permits drawings in either 1, 2, or 3 month periods. This increased flexibility will better facilitate the timing of the IESO's liquidity needs.

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CURRENT STATUS

- The credit facility is currently provided on a revolving basis, with each draw maturing within one, two or three month(s). The interest rate charged on any balance of the credit facility is equal to the Province's cost of borrowing for a similar term, plus 25 basis points (i.e., 0.25%).
- In the last five years, the IESO (previously known as the OPA) has had an outstanding amount as high as \$280 million in February 2013 under this credit facility.
- The IESO last requested an advance of approximately \$95 million under the facility on August 19, 2016, which is expected to be repaid September 19, 2016.
- Prior to this, the IESO had requested a \$12.7 million advance in December 2015 which was repaid in March 2016.
- The IESO expects to rely more on this credit facility in the coming years than it has in the last five years as the IESO takes on roles in areas such as the Ontario Electricity Support Program (OESP), Rural or Remote Rate Protection (RRRP) and potential involvement in the cap and trade regime.
- In the September 2016, the government announced increased funding for the RRRP program which may result in an increased utilization of this credit facility by the IESO.
- IESO has indicated that it will need to provide liquidity for Ontario's Cap and Trade Program starting in 2017. IESO would be expected to provide liquidity upfront into the market and be reimbursed by the government in due course.

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Commented [JK1]: EFB staff will update this part next week.

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- ~~In the last five years, the IESO (previously known as the OPA) has had an outstanding amount as high as \$280 million in February 2013 under this credit facility.~~
- ~~The credit facility is currently provided on a revolving basis, with each draw maturing within one, two or three month(s). The interest rate charged on any balance of the credit facility is equal to the Province's cost of borrowing for a similar term, plus 25 basis points (i.e., 0.25%).~~

USES OF THE CREDIT FACILITY

The table below provides an overview of the estimated amount allocated for each use, as provided by the IESO.

<u>Financial Obligation</u>	<u>Amt. (\$ M)</u>
<u>1. RPP variance account exposure between RPP rate-setting periods</u>	<u>\$100 - \$325</u>
<u>2. New variance accounts (OESP, RRRP) and liquidity related to the potential Cap and Trade Program</u>	<u>\$15 - \$325</u>
<u>3. Global Adjustment and Overall Market Liquidity and any other timing differences including conservation programs and generation contracts</u>	<u>\$25 - \$325</u>
<u>Total: Short-Term Borrowing Requirements</u>	<u>\$140 - \$975</u>

FISCAL IMPACT

- There would be a relatively small but positive fiscal impact for the Province as a result of this credit facility.
 - The Province receives a small fiscal benefit by adding 25 basis points (i.e., 0.25%) to the Provinces cost of borrowing for funds provided to the IESO under the facility.
- Both the IESO and OFA are consolidated with the Province on a line by line basis. For the OFA and the Province, costs associated with the credit facility are recovered from the IESO. For the IESO, principal and interest associated with the credit facility are recovered from electricity ratepayers.

RECOMMENDATION

- OFA staff recommend the Minister sign the Lending Directive, allowing the OFA to extend the term of the existing credit agreement by an additional three years.

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- Maintaining the \$975 million credit limit will allow the IESO to provide liquidity into the electricity market to support various initiatives including the Regulated Price Plan (RPP), the Rural or Remote Electricity Rate Protection (RRRP), the new Ontario Electricity Support Program (OESP), the various conservation programs and overall market liquidity.

MINISTER'S DIRECTIVE

Minister of Finance's Lending Directive would authorize the OFA to extend the existing credit facility with the IESO for an additional 3 years.

FISCAL IMPACT

- There would be a relatively small but positive fiscal impact for the Province as a result of this credit facility.
- The Province receives a small fiscal benefit by adding 25 basis points (i.e., 0.25%) to the Province's cost of borrowing for funds provided to the IESO under the facility.
- Both the IESO and OFA are consolidated with the Province on a line by line basis. For the OFA and the Province, costs associated with the credit facility are recovered from the IESO. For the IESO, principal and interest associated with the credit facility are recovered from electricity ratepayers.

DETAILS AND ANALYSIS

The IESO's October 2016 request indicates that cash needs for timing differences could be up to \$975 million over the next three years, depending on electricity market conditions and are grouped into the following three uses:

- the Regulated Price Plan (RPP) variance account
- new variance accounts such as the Ontario Electricity Support Program (OESP), Rural or Remote Electricity Rate Program (RRRP), potential cap and trade, and
- general overall market liquidity including the Global Adjustment payments and conservation programs.

The IESO has also requested for the drawdowns to be based on the number of days, for a minimum of 28 days and up to a maximum of 95 days. The existing credit facility agreement only permits drawings in either 1, 2, or 3 month periods. This increased flexibility will better facilitate the timing of the IESO's liquidity needs.

OFA Capital Markets has confirmed that they have no issues with this request for increased flexibility. All drawdowns will be priced at the Province's cost of borrowing plus 25 basis points based on a similar term as the advance.

1. RPP Variance Account

The RPP variance account holds the difference between the price of power charged to RPP customers set by the Ontario Energy Board (OEB) and the current market prices. Should the variance account fall into a deficit where the payments to generators is less than the receipts from customers, the IESO would be responsible to finance this shortfall through this credit facility.

The Ontario Energy Board (OEB) is required by legislation to take into account any balance in this account in setting subsequent RPP prices, which it has been doing semi-annually. Therefore, shortfalls in the variance account would be expected to be eliminated through subsequent RPP prices.

- The RPP variance account was at a surplus of \$46 million as at August 31, 2016. Over the last three years, the highest RPP shortfall was \$117 million in May 2016.
- The RPP variance account had the largest shortfall of \$417 million in May 2006 primarily due to higher than expected market prices which led to the drawdown of this credit facility.
- Most generation supply has its price set by regulation and contract, so market pricing is no longer a significant risk for an RPP variance balance.

2. New Variance Accounts

Similar to the RPP variance account, new variance accounts support the liquidity requirements for the Ontario Electricity Support Program (OESP), Rural or Remote Electricity Rate Program (RRRP) and the potential Cap and Trade Program. The IESO may be required to provide payments upfront and be reimbursed in due course.

- i. Ontario Electricity Support Program (OESP) – up to \$50 million
 - Based on O Reg. 314/15, the IESO is asked to settle the OESP program, which began in January 2016
 - The IESO will charge the OESP's flat rate to electricity market participants. The LDCs place a claim for their OESP costs resulting in a payout from IESO to the LDCs. Should the claims be higher than what the IESO has collected, this credit facility will be utilized.
 - The OEB revises the OESP fixed rate once per year (between November to January) to allow future OESP collections and claims to bring any outstanding balances in the variance account to zero.
 - The IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding for up to 12 months.
- ii. Rural or Remote Electricity Rate Program (RRRP) – up to \$100 million
 - The RRRP follows the same principle and structure as the OESP where the OEB sets regulated fixed RRRP rates once per year and the credit facility is used when claims could be higher than what the IESO has collected.

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- The RRRP program was previously administered by Hydro One, with the IESO taking over the responsibility in April 2016.
- In the September 2016, the government announced increased funding for the RRRP program which may result in an increased utilization of this credit facility by the IESO.
- The IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding for up to 12 months.

iii. Cap and Trade program – up to \$175 million

- There may be a requirement for the IESO to provide liquidity for Ontario's Cap and Trade Program starting in 2017. IESO would be expected to provide liquidity upfront into the market and be reimbursed by the government in due course.
- Rates and program information have not been specified at this time.

3. Global Adjustment and Overall Market Liquidity

The Global Adjustment (GA) is charged to all electricity market participants each month. From the collection of this levy, payments are made towards Conservation Programs and Generation Contracts:

i. Conservation Programs – up to \$125 million

- Conservation programs typically have a one month lag between payments to participating program participants and recovery from rate payers through the GA.
- Examples of these programs include:
 - Industrial Accelerator Program (for conservation retrofit)
 - Aboriginal Programs (Energy Partnerships Program, Education and Capacity Building Program and Aboriginal Community Energy Plan)
 - Conservation Marketing Campaigns (i.e. saveONenergy)
 - Innovation & Collaboration Program – Conservation programs delivered by LDCs
 - Peaksaver Plus
 - Conservation Coupons (i.e. energy efficient lightbulbs from retail stores)
 - Pay-for-Performance – Participants are rewarded for improving whole building energy performance through payment of annual financial incentives
 - Whole Home Program – Program to incentivize home owners to undertake energy efficient home improvements
- These conservation programs start and end at different times as initiated and directed by the Minister of Energy.
- The IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding from one month to up to one year based on the conservation program.

ii. Generation Contracts – up to \$100 million

- The IESO is also the counterparty to supply contracts totalling over 27,200 MW as of June 30, 2016 (of which about 23,670 MW are in-service as of June 30, 2016). Costs associated with these contracts are recovered from consumers through the Global Adjustment mechanism on a monthly basis.

- There may be very short-term cash requirements, often within a month, resulting from differences between actual payments to generators and IESO's estimated recovery from ratepayers.

- IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding for up to 1-3 months.

iii. Overall Market Liquidity – up to \$100 million

- IESO is required to provide market liquidity to the electricity market by ensuring market transactions are cleared in a timely manner.
- Should one party be late with payment to another, the IESO is required to step in and ensure the receiver is paid in a timely manner. For this purpose, the IESO may require the use of the credit facility while the issues are resolved.
- All market participants place collateral which the IESO can utilize as a last resort.
- The IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding for up to 3 months.
- For example, in August 2016 the IESO may have had to settle approximately \$125 million due to late payment by an LDC. The LDC was able to make a last minute payment and the IESO avoided drawing down on this credit facility.

DETAILED OPTIONS

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Option 1: Extend at \$975 million (Recommended)

- Maintaining the \$975 million credit facility responds directly to the IESO request and does not signal any change in the Province's commitment to finance the IESO.
- Maintaining this level also allows for possible changes in the IESO's operating environment and would preserve flexibility for the IESO to fund any unforeseen short-term cash requirements, at a time when the IESO could take on an increasing role in areas such as the OESP, the RRRP and potential involvement in the cap and trade regime.
 - The IESO expects to rely more on this credit facility in the coming years than it has in the last five years.
 - In the September 2016, the government announced increased funding for the RRRP program which may result in an increased utilization of this credit facility by the IESO.
 - IESO has indicated that it will need to provide liquidity for Ontario's Cap and Trade Program starting in 2017. IESO would be expected to provide liquidity upfront into the market and be reimbursed by the government in due course.
- OFA staff recommend providing the extension on the basis that the facility will continue to be used to support financing needs related to programs with a short-term cost recovery period.
 - The Ontario Electricity Financial Corporation will continue to maintain IESO's other credit facility which is used by IESO for non-market related and/or corporate activities. The IESO has indicated that they expect to extend that facility in the coming months.

Option 2: Extend at a Reduced Level at \$800 million

- Of the current \$975 million extension request, IESO estimates \$175 million will be related to the newly announced Cap-and-Trade program. As this is very preliminary, the credit facility could be reduced by removing this estimate.
 - However doing so ~~will~~may result in the IESO returning to the OFA to increase the facility in 2017 when the program is active and better data is available.
- In September 2016, the government announced a proposed new 8% rebate for regulated price plan (RPP) consumers, including residential consumers, referred to as the Ontario Rebate for Electricity Consumers (OREC).
 - IESO has indicated that unless the rebate is delivered similarly to the Ontario Clean Energy Benefit (OCEB) rebate, which is the likely outcome, there could be a potential use of the credit facility for this purpose subject to how the Province facilitates the program.

- It should be noted that the OCEB has always been delivered by the IESO and upon the amalgamation of the OPA and IESO, it was generally determined that all financings through the OFA would be for OPA's legacy purposes and legacy IESO requirements would be financed through the OEFC.
 - It is unclear if the usage of this credit facility for legacy IESO purposes could be prevented or if implementing that restriction strictly would be desirable.
- A lower credit facility limit would be a departure from the decision made three years ago, when the \$975 million credit facility was extended to manage similar exposures.
 - The credit facility was first increased to \$975 million in October 2005 and has remained at this level since then.
 - The IESO expects increased usage of this credit facility in the coming three years due to the expansion of the RRRP program, the new Cap-and-Trade program and the government's latest initiative to rebate eight-percent to residential consumers.
 - Furthermore in 2016 the IESO began to administer the OESP and RRRP programs. These rates are set annually and creates a delay between shortfalls and when the OEB sets the rates to recover the shortfalls.
- According to OFA's Capital Markets Division staff, reducing the IESO credit limit would not produce any cost savings to the Province.
 - For this facility, the Province borrows short-term on an as-needed basis and passes any costs on to the IESO
 - OFA Capital Markets have confirmed that drawdowns of the revolving short-term credit facility only affects the short-term borrowings of the Province and does not impact the long-term borrowing requirements.

Option 3: Do Not Extend the Credit Facility

- If the OFA does not provide this credit facility, the IESO would need to access debt capital markets for its financing requirements.
 - The IESO is rated by Moody's as Aa2/Stable – an identical rating as the Province of Ontario.¹
- This would relieve the OFA of its \$975 million commitment; however, it could result in the cost of borrowing for IESO to increase with a corresponding increase in the recovery from ratepayers. This approach would be inconsistent with the government's public bodies financing policy.

USES OF THE CREDIT FACILITY

~~The table below provides an overview of the estimated amount allocated for each use, as provided by the IESO.~~

¹ https://www.moody's.com/research/Moodys-changes-the-outlook-for-the-Independent-Electricity-System-Operator--PR_348001

~~Financial Obligation~~	~~Amt. (\$M)~~
~~1. RPP variance account exposure between RPP rate setting periods~~	~~\$100 — \$325~~
~~2.1. New variance accounts (OESP, RRRP) and liquidity related to the potential Cap and Trade Program~~	~~\$15 — \$325~~
~~3.1. Global Adjustment and Overall Market Liquidity and any other timing differences including conservation programs and generation contracts~~	~~\$25 — \$325~~
~~Total Short Term Borrowing Requirements~~	~~\$140 — \$975~~

BACKGROUND

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HISTORY

The OPA, now merged with the IESO into an entity also known as the IESO, was established under the *Electricity Restructuring Act, 2004*, and commenced operations in January 2005.

In December 2004, the Minister of Finance directed the OFA to provide loans to the OPA, as a public body, on a transitional basis, until the OPA is able to access capital markets. The directive also established a \$500 million credit facility limit. OPA's financing requirements stem primarily from its responsibility for managing and funding the RPP.

In October 2005 the credit facility was increased from \$500 million to \$975 million. The original credit facility was not sufficient to meet OPA's financing requirements for the RPP variance account as a result of higher than forecasted electricity prices and consumption.

The credit agreement was renewed in November 2010 for a three year term. The OPA cited short-term cash needs of \$320 - \$600 million over the three year period, citing uptake of conservation programs, the microFIT program, and electricity market conditions affecting the RPP variance account as reasons for requiring the extension.

The credit agreement was extended in December 2013 for another three year term.

The agreement was last amended in December 2014 following the amalgamation of the Ontario Power Authority and the IESO where the new "IESO" assumed all rights and obligations under the existing OFA-OPA \$975 million credit facility agreement

Electricity Finance Branch / Corporate and Electricity Finance Division
Ontario Financing Authority
October 1, 2016

Appendix: Illustrative Amendments to OFA-IESO Credit Facility Agreement

Commented [SQ22]: The agreement is being worked on still by CMD and OFA Legal. This may be updated slightly before proceeding to DMO/MO.

The following amendments are illustrative and provide an indication of the changes that will be necessary in order to amend the existing Credit Facility Agreement to correspond to the Minister's Directive.

The proposed Minister's Directive assumes that the Credit Facility Agreement will be extended for three years at the current \$975 million limit and includes language to ensure the IESO uses proceeds for liquidity purposes.

1. Section 2.4 of the Agreement is deleted and replaced by the following:

"Subject to Sections 2.9 and 5.1, the IESO shall repay each Advance on the applicable Repayment Date and, in any event, shall repay all Advances Outstanding, together with all accrued interest and all other amounts owing hereunder on December 31, 2019."

2. Section 3.1 of the Agreement is deleted and replaced by the following:

"The OFA agrees, on the terms and conditions of this Agreement, to make Advances to the IESO under the Operating Facility from time to time on any Business Day prior to November 30, 2019."

3. Section 3.2 (1) of the Agreement is deleted and replaced by the following:

"Subject to Section 3.3(3), each Advance shall be made on two Business Day's prior notice given not later than 10:00 a.m. (Toronto time) by the IESO to the OFA. Each notice of an Advance (a "Borrowing Notice") shall be substantially in the form of Schedule 1, shall be irrevocable and binding on the IESO and shall specify (a) the requested date of the Advance, and (b) the principal amount of the Advance, and (c) the Repayment date of the Advance which shall be for a minimum of 28 days and not later than a maximum of 95 days after the requested date of the Advance. The OFA will make the principal amount of each Advance available to the IESO in accordance with Article 2."

4. Section 3.3 (1) of the Agreement is deleted and replaced by the following:

"The IESO may elect to continue all or a portion of the principal amount of any Advance for a further period of a minimum of 28 days up to a maximum of 95 days beginning on the current Repayment Date in accordance with Section 3.3(2)."

5. Section 5.1 (b) of the Agreement is deleted and replaced by the following:

"failure to pay the principal amount of any Advance on the applicable Repayment Date or the Advances Outstanding, all interest accrued thereon and all other amounts owing under this Agreement on December 31, 2019;"

From: [Ronald Kwan](#)
To: [John Kim](#)
Cc: [Tomasz Bugajski](#); [Salman Qadir](#); [Shajee Kathirgamanathan](#)
Subject: RE: IESO 975 facility
Date: Friday, November 18, 2016 1:19:06 AM
Attachments: [IESO \(OPA legacy\) LoC Credit Facility Extension - BN Signed Markup.docx](#)

Hi John,

Some suggestions to the BN, as attached.

Ron

From: John Kim
Sent: November-02-16 3:05 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Tomasz Bugajski <Tomasz.Bugajski@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: RE: IESO 975 facility

Pls. see attached.

From: Ronald Kwan
Sent: Wednesday, November 02, 2016 3:03 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Tomasz Bugajski <Tomasz.Bugajski@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: Re: IESO 975 facility

Hi,

Please send me an electronic copy.

Thanks,
Ron

From: John Kim
Sent: November 2, 2016 3:01 PM
To: Ronald Kwan
Cc: Tomasz Bugajski; Salman Qadir; Shajee Kathirgamanathan
Subject: RE: IESO 975 facility

Hi Ron,

Pls. see link below where the latest package files are and a reminder. I know it's a busy period but IESO is following up and they have provided a draft Board resolution for our information, which they are ready to have their secretary sign.

Z:\Users\CEF\Hydro 2016\IESO\Financing\IESO - 975M LoC 2016 Renewal\Final Signed Doc

We provided a hardcopy package earlier.

Thanks,

John.

From: John Kim

Sent: Sunday, October 09, 2016 2:10 PM

To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>

Cc: Tomasz Bugajski <Tomasz.Bugajski@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>;
Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>

Subject: IESO 975 facility

Hi Ron,

As promised, pls. see attached briefing note summarizing IESO's request and EFB's due diligence on the request.

Based on your feedback, we will work to finalize the package in the coming week.

Thanks,

John.

Y. John Kim

Director(A), Electricity Finance Branch

Corporate & Electricity Finance Division

Ontario Financing Authority

Ph: 416-212-6996

Email: john.kim@ofina.on.ca

IESO (OPA LEGACY) CREDIT FACILITY EXTENSION

The Independent Electricity System Operator (IESO) has requested a three-year extension to December 31, 2019, of the \$975 million revolving credit facility provided by the ~~Province through the~~ Ontario Financing Authority (OFA). To accommodate this request, the OFA requires a new Lending Directive from the Minister of Finance.

- The existing credit facility agreement, which expires on December 31, 2016, was ~~originally provided to the Ontario Power Authority (OPA) and was~~ last amended in December 2014 ~~to accommodate following~~ the amalgamation of the ~~Ontario Power Authority (OPA)~~ and the IESO, effective January 1, 2015, where the new "IESO" assumed all rights and obligations under the existing OFA-OPA \$975 million credit agreement.

MINISTER'S DIRECTIVE

A Minister of Finance's Lending Directive would authorize the OFA to extend the existing credit facility with the IESO for an additional 3 years.

CURRENT STATUS

- The credit facility is currently provided on a revolving basis, with each draw maturing within one, two or three month(s). The interest rate charged on any balance of the credit facility is equal to the Province's cost of borrowing for a similar term, plus 25 basis points (i.e., 0.25%).

~~In the last five years, the IESO (previously known as the OPA) has had an outstanding amount as high as \$280 million in February 2013 under this credit facility.~~

- ~~Recent~~The IESO ~~last requested an advance~~draws have included ~~of~~ approximately \$95 million under the facility on August 19, 2016, which was repaid on September 19, 2016, ~~and IESO then further re-advanced~~ approximately \$46 million on September 19, 2016, ~~which is expected to be~~ repaid on October 19, 2016.

~~Prior to this, the IESO had requested a \$12.7 million advance in December 2015 which was repaid in March 2016.~~

~~In the last five years, the IESO (previously known as the OPA) has had an outstanding amount as high as \$280 million in February 2013 under this credit facility.~~

- ~~The credit facility is currently provided on a revolving basis, with each draw maturing within one, two or three month(s). The interest rate charged on any balance of the credit facility is equal to the Province's cost of borrowing for a similar term, plus 25 basis points (i.e., 0.25%).~~

- The IESO Board of Directors ~~is expected to~~ approved [CONFIRM] this request at ~~their~~its October 2016 board meeting ~~which will be required prior to executing the related credit agreement extension.~~

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Commented [RK1]: CHECK / CONFIRM wording ("advance"?
– "draw"?) and repayment.

RECOMMENDATION

- ~~OFA staff recommend~~That the Minister sign the Lending Directive ~~allowing to~~ the OFA to extend the term of the existing credit agreement by an additional three years.
 - Maintaining the \$975 million credit limit will allow the IESO to be able to provide, as required, liquidity into the electricity market to support various initiatives including the Regulated Price Plan (RPP), the expanded Rural or Remote Electricity Rate Protection (RRRP), the new Ontario Electricity Support Program (OESP), the various conservation programs, and overall market liquidity.

MINISTER'S DIRECTIVE

~~Minister of Finance's Lending Directive would authorize the OFA to extend the existing credit facility with the IESO for an additional 3 years.~~

FISCAL IMPACT

- There would likely be a relatively small but positive fiscal impact for the Province as a result of this credit facility.
 - The Province ~~receives a small fiscal benefit by adding a~~ 25 basis points (i.e., 0.25%) spread to the Province's cost of borrowing to set the interest rate on the funds provided to the IESO under the facility, which is expected to be more than sufficient to cover the OFA's borrowing and administrative costs.
- Both the IESO and OFA are consolidated with the Province on a line by line basis. For the OFA and the Province, costs associated with the credit facility are recovered from the IESO. For the IESO, principal and interest associated with the credit facility are recovered from electricity ratepayers.

DETAILS AND ANALYSIS

The IESO's October 6, 2016 request indicates that cash needs for timing differences could be up to \$975 million over the next three years, depending on electricity market conditions and are grouped into the following three uses:

- the Regulated Price Plan (RPP) variance account;
- new variance accounts such as for the new Ontario Electricity Support Program (OESP), the Rural or Remote Electricity Rate Program (RRRP, where variances used to be the responsibility of Hydro One, prior to the IPO), and potentially for cap and trade; and
- general overall market liquidity including the Global Adjustment payments and conservation programs.

Commented [RK2]: Confirm

The IESO has also requested for the drawdowns to be based on the number of days, for a minimum of 28 days and up to a maximum of 95 days. The existing credit facility agreement only permits drawings in either 1, 2, or 3 month periods. This increased flexibility will better facilitate the timing of the IESO's liquidity needs.

OFA Capital Markets has confirmed that they have no issues with this request for increased flexibility. All drawdowns will be priced at the Province's cost of borrowing plus 25 basis points based on a similar term as the advance.

Option 1: Extend at \$975 million (Recommended)

- Maintaining the \$975 million credit facility responds directly to the IESO request and does not signal any change in the Province's commitment to finance the IESO.
- Maintaining this level also allows for possible changes in the IESO's operating environment and would preserve flexibility for the IESO to fund any unforeseen short-term cash requirements, at a time when the IESO could take on an increasing role in areas such as the OESP, the RRRP and potential involvement in the cap and trade regime.
 - The IESO expects to rely more on this credit facility in the coming years than it has in the last five years.
 - In the September 2016, the government announced increased funding for the RRRP program, which may result in an increased utilization of this credit facility by the IESO.
 - IESO has indicated that it will need to provide liquidity for Ontario's Cap and Trade Program starting in 2017. IESO would be expected to provide liquidity upfront into the market and be reimbursed by the government in due course.
- OFA staff recommend providing the extension on the basis that the facility will continue to be used to support financing needs related to programs with a short-term cost recovery period.

The Ontario Electricity Financial Corporation will continue to maintain IESO's other credit facility, which is used by the IESO for non-market related and/or corporate activities. The IESO has indicated that they expect to extend that facility in the coming months.
- According to OFA's Capital Markets Division staff, reducing the IESO credit limit would not produce any cost savings to the Province.
 - For this facility, the Province borrows short-term on an as-needed basis and passes any costs on to the IESO
 - OFA Capital Markets have confirmed that drawdowns of the revolving short-term credit facility only affects the short-term borrowings of the Province and does not impact the long-term borrowing requirements.

Option 2: Extend at a Reduced Level at \$800 million

- Of the current \$975 million extension request, IESO estimates \$175 million will be related to the newly announced Cap-and-Trade program. As this estimate is very preliminary, the credit facility could be reduced by removing this estimate.
 - However doing so will result in the IESO returning to the OFA to increase the facility in 2017 when the program is active and better data is available.
- A lower credit facility limit would be a departure from the decision made three years ago, when the \$975 million credit facility was extended to manage similar exposures.
 - The credit facility was first increased to \$975 million in October 2005 and has remained at this level since then.
 - The IESO expects increased usage of this credit facility in the coming three years due to the expansion of the RRRP program, the new Cap-and-Trade program and the government's latest initiative to rebate eight-percent to residential consumers.
 - Furthermore in 2016 the IESO began to administer the OESP and RRRP programs. These rates are set annually and creates a delay between shortfalls and when the OEB sets the rates to recover the shortfalls.
- In September 2016, the government announced a new 8% rebate for residential consumers, referred to as the Ontario Rebate for Electricity Consumers (OREC).
 - IESO has indicated that unless the rebate is delivered similar to the Ontario Clean Energy Benefit (OCEB) rebate, there could be a potential use of the credit facility for this purpose subject to how the Province facilitates the program.
 - It should be noted that the OCEB has always been delivered by the IESO and upon the amalgamation of the OPA and IESO, it was generally determined that all financings through the OFA would be for OPA's legacy purposes and legacy IESO requirements would be financed through the OEFC.
 - It is unclear if the usage of this credit facility for legacy IESO purposes could be prevented or if implementing that restriction strictly would be desirable.
- ~~A lower credit facility limit would be a departure from the decision made three years ago, when the \$975 million credit facility was extended to manage similar exposures.~~
 - ~~The credit facility was first increased to \$975 million in October 2005 and has remained at this level since then.~~
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Commented [RK3]: Is this what we expect?

Option 3: Do not Extend the Credit Facility

- If the OFA does not provide this credit facility, the IESO would need to access debt capital markets for its financing requirements.
 - The IESO is rated by Moody's as Aa2/Stable – an identical rating as the Province of Ontario¹.
- This would relieve the OFA of its \$975 million commitment; however, could result in the cost of borrowing for IESO to increase with a corresponding increase in the recovery from ratepayers. This approach would be inconsistent with the government's public bodies financing policy.

USES OF THE CREDIT FACILITY

The table below provides an overview of the estimated amount allocated for each use, as provided by the IESO.

Financial Obligation	Amt. (\$ M)
1. RPP variance account exposure between RPP rate-setting periods	\$100 - \$325
2. New variance accounts (OESP, RRRP) and liquidity related to the potential Cap and Trade Program	\$15 - \$325
3. Global Adjustment and Overall Market Liquidity and any other timing differences including conservation programs and generation contracts	\$25 - \$325
Total: Short-Term Borrowing Requirements	\$140 - \$975

1. RPP Variance Account

The RPP variance account holds the difference between the price of power charged to RPP customers set by the Ontario Energy Board (OEB) and the current market prices. Should the variance account fall into a deficit where the payments to generators is less than the receipts from customers, the IESO would be responsible to finance this shortfall through this credit facility.

The Ontario Energy Board (OEB) is required by legislation to take into account any balance in this account in setting subsequent RPP prices. Therefore, shortfalls in the variance account would be expected to be eliminated through subsequent RPP prices.

- The RPP variance account was at a surplus of \$46 million as at August 31, 2016. Over the last three years, the highest RPP shortfall was \$117 million in May 2016.

¹ https://www.moody's.com/research/Moodys-changes-the-outlook-for-the-Independent-Electricity-System-Operator--PR_348001

- The RPP variance account had the largest shortfall of \$417 million in May 2006 primarily due to higher than expected market prices which led to the drawdown of this credit facility.

2. New Variance Accounts

Similar to the RPP variance account, new variance accounts support the liquidity requirements for the Ontario Electricity Support Program (OESP), Rural or Remote Electricity Rate Program (RRRP) and the potential Cap and Trade Program. The IESO may be required to provide payments upfront and be reimbursed in due course.

- i. Ontario Electricity Support Program (OESP) – up to \$50 million
 - Based on O Reg. 314/15, the IESO is asked to settle the OESP program, which began in January 2016
 - The IESO will charge the OESP's flat rate to electricity market participants. The LDCs place a claim for their OESP costs resulting in a payout from IESO to the LDCs. Should the claims be higher than what the IESO has collected, this credit facility will be utilized.
 - The OEB revises the OESP fixed rate once per year (between November to January) to allow future OESP collections and claims to bring any outstanding balances in the variance account to zero.
 - The IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding for up to 12 months.
- ii. Rural or Remote Electricity Rate Program (RRRP) – up to \$100 million
 - The RRRP follows the same principle and structure as the OESP where the OEB sets regulated fixed RRRP rates once per year and the credit facility is used when claims could be higher than what the IESO has collected.
 - The RRRP program was previously administered by Hydro One, with the IESO taking over the responsibility in April 2016.
 - In the September 2016, the government announced increased funding for the RRRP program which may result in an increased utilization of this credit facility by the IESO.
 - The IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding for up to 12 months.
- iii. Cap and Trade program – up to \$175 million
 - There may be a requirement for the IESO to provide liquidity for Ontario's Cap and Trade Program starting in 2017. IESO would be expected to provide liquidity upfront into the market and be reimbursed by the government in due course.
 - Rates and program information have not been specified at this time.

3. Global Adjustment and Overall Market Liquidity

The Global Adjustment (GA) is charged to all electricity market participants each month. From the collection of this levy, payments are made towards Conservation Programs and Generation Contracts:

- i. Conservation Programs – up to \$125 million
 - Conservation programs typically have a one month lag between payments to participating program participants and recovery from rate payers through the GA.
 - Examples of these programs include:
 - Industrial Accelerator Program (for conservation retrofit)
 - Aboriginal Programs (Energy Partnerships Program, Education and Capacity Building Program and Aboriginal Community Energy Plan)
 - Conservation Marketing Campaigns (i.e. saveONenergy)
 - Innovation & Collaboration Program – Conservation programs delivered by LDCs
 - Peaksaver Plus
 - Conservation Coupons (i.e. energy efficient lightbulbs from retail stores)
 - Pay-for-Performance – Participants are rewarded for improving whole building energy performance through payment of annual financial incentives
 - Whole Home Program – Program to incentivize home owners to undertake energy efficient home improvements
 - These conservation programs start and end at different times as initiated and directed by the Minister of Energy.
 - The IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding from one month to up to one year based on the conservation program.
- ii. Generation Contracts – up to \$100 million
 - The IESO is also the counterparty to supply contracts totalling over 27,200 MW as of June 30, 2016 (of which about 23,670 MW are in-service as of June 30, 2016). Costs associated with these contracts are recovered from consumers through the Global Adjustment mechanism on a monthly basis.
 - There may be very short-term cash requirements, often within a month, resulting from differences between actual payments to generators and IESO's estimated recovery from ratepayers.
 - IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding for up to 1-3 months.
- iii. Overall Market Liquidity – up to \$100 million
 - IESO is required to provide market liquidity to the electricity market by ensuring market transactions are cleared in a timely manner.
 - Should one party be late with payment to another, the IESO is required to step in and ensure the receiver is paid in a timely manner. For this purpose, the IESO may require the use of the credit facility while the issues are resolved.

- All market participants place collateral which the IESO can utilize as a last resort.
- The IESO estimates that a drawdown on the credit facility for this purpose can remain outstanding for up to 3 months.
- For example, in August 2016 the IESO may have had to settle approximately \$125 million due to late payment by an LDC. The LDC was able to make a last minute payment and the IESO avoided drawing down on this credit facility.

HISTORY

The OPA, now merged with the IESO into an entity also known as the IESO, was established under the *Electricity Restructuring Act, 2004*, and commenced operations in January 2005.

In December 2004, the Minister of Finance directed the OFA to provide loans to the OPA on a transitional basis, until the OPA is able to access capital markets. The directive also established a \$500 million credit facility limit. OPA's financing requirements stem primarily from its responsibility for managing and funding the RPP.

In October 2005 the credit facility was increased from \$500 million to \$975 million. The original credit facility was not sufficient to meet OPA's financing requirements for the RPP variance account as a result of higher than forecasted electricity prices and consumption.

The credit agreement was renewed in November 2010 for a three year term. The OPA cited short-term cash needs of \$320 - \$600 million over the three year period, citing uptake of conservation programs, the microFIT program, and electricity market conditions affecting the RPP variance account as reasons for requiring the extension.

The credit agreement was extended in December 2013 for another three year term.

The agreement was last amended in December 2014 following the amalgamation of the Ontario Power Authority and the IESO where the new "IESO" assumed all rights and obligations under the existing OFA-OPA \$975 million credit facility agreement

Electricity Finance Branch / Corporate and Electricity Finance Division
Ontario Financing Authority
~~October~~ November 2016

Appendix: Illustrative Amendments to OFA-IESO Credit Facility Agreement

The following amendments are illustrative and provide an indication of the changes that will be necessary in order to amend the existing Credit Facility Agreement to correspond to the Minister's Directive.

The proposed Minister's Directive assumes that the Credit Facility Agreement will be extended for three years at the current \$975 million limit and includes language to ensure the IESO uses proceeds for liquidity purposes.

1. Section 2.4 of the Agreement is deleted and replaced by the following:

"Subject to Sections 2.9 and 5.1, the IESO shall repay each Advance on the applicable Repayment Date and, in any event, shall repay all Advances Outstanding, together with all accrued interest and all other amounts owing hereunder on December 31, 2019."

2. Section 3.1 of the Agreement is deleted and replaced by the following:

"The OFA agrees, on the terms and conditions of this Agreement, to make Advances to the IESO under the Operating Facility from time to time on any Business Day prior to November 30, 2019."

3. Section 3.2 (1) of the Agreement is deleted and replaced by the following:

"Subject to Section 3.3(3), each Advance shall be made on two Business Day's prior notice given not later than 10:00 a.m. (Toronto time) by the IESO to the OFA. Each notice of an Advance (a "Borrowing Notice") shall be substantially in the form of Schedule 1, shall be irrevocable and binding on the IESO and shall specify (a) the requested date of the Advance, and (b) the principal amount of the Advance, and (c) the Repayment date of the Advance which shall be for a minimum of 28 days and not later than a maximum of 95 days after the requested date of the Advance. The OFA will make the principal amount of each Advance available to the IESO in accordance with Article 2."

4. Section 3.3 (1) of the Agreement is deleted and replaced by the following:

"The IESO may elect to continue all or a portion of the principal amount of any Advance for a further period of a minimum of 28 days up to a maximum of 95 days beginning on the current Repayment Date in accordance with Section 3.3(2)."

5. Section 5.1 (b) of the Agreement is deleted and replaced by the following:

"failure to pay the principal amount of any Advance on the applicable Repayment Date or the Advances Outstanding, all interest accrued thereon and all other amounts owing under this Agreement on December 31, 2019;"

From: [John Kim](#)
To: [Ronald Kwan](#)
Cc: [Bruno Amara](#); [Salman Qadir](#)
Subject: RE: IESO credit facility
Date: Friday, May 05, 2017 4:14:43 PM

Hi Ron,

Along this item, we have a question. We have been running under the assumption that the OFA would be providing the facility much like the 975M facility. Is that the fair assumption or should be contemplate the scenario of the Province lending to the IESO. I understand the H1 loan was done under the latter scenario.

Just throwing it out there so that we are not being presumptuous.

Thanks,

John

From: Bruno Amara
Sent: Friday, May 05, 2017 4:10 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: IESO credit facility

Hi Ron

We added a note about the need for an OIC in the attached deck. Also below is some draft wording for a Note to be included in Energy's submission. I have sent it to TBS asking for comment and noting that it is placeholder that can be finalized early next week. I have not yet heard back from TBS.

Note, that in order to ensure that the IESO has the flexibility to cover clean energy costs, if for some reason the Trust, at any time, does not purchase any portion of the deferred Global Adjustment amounts payments, a new credit facility is being requested by the IESO. An order-in-council will be sought to allow the OFA to be able to provide the new credit facility to the IESO, for an amount to be determined as per the requirements of the Fair Hydro Plan.

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

From: [Salman Qadir](#)
To: [Ronald Kwan](#); [Gavin He](#)
Cc: [John Kim](#); [Bruno Amara](#)
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal
Date: Wednesday, March 29, 2017 5:02:38 PM

Hi Ron,

Definitely reads better. I'll update the note.

Salman

From: Ronald Kwan
Sent: Wednesday, March 29, 2017 5:01 PM
To: Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Salman,

How about some tweaks:

*The IESO **also** has a separate credit facility with the OFA **that** provides short-term financing for market-related transactions such as financing variance accounts, and **it** could potentially use that credit facility to **manage short-term timing differences, if any, in implementing the proposed** GA smoothing.*

From: Salman Qadir
Sent: March-29-17 16:44
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Not a problem. I've added it to the note under the heading that covers details of the line of credit:
The IESO has a separate credit facility with the OFA which provides short-term financing for market-related transactions such as financing variance accounts and could potentially use that credit facility to finance the GA smoothing proposal on a short-term basis.

<Z:\Users\CEF\Hydro 2017\IESO\Financing\IESO-OEFC Line of Credit\OFA Package>

Please see attached.

Salman

From: Ronald Kwan

Sent: Wednesday, March 29, 2017 4:33 PM

To: Gavin He <Gavin.He@ofina.on.ca>

Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>

Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi,

Can we add that point to the BN instead, and not to the memo?

Thanks,

Ron

From: Gavin He

Sent: March-29-17 16:27

To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>

Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>

Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the updated IESO BN and Memo for your review.

EFB has accepted your edits on the BN and has no further edits. For the memo, EFB added additional language for your consideration. These facilities are meant to support IESO's corporate needs (working capital and capex) and any transactions that involve market activities (variances accounts etc.) would be financed through the \$975 credit facility IESO has with the OFA. It is possible that IESO could use the \$975 facility for GA smoothing, subject to review.

Thanks,

Gavin He

From: Gavin He

Sent: Monday, March 20, 2017 5:13 PM

To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>

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

Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the updated BN on IESO loan agreements for your review. EFB has addressed your comments from your previous review.

Thanks,
Gavin He

From: Ronald Kwan
Sent: Monday, March 13, 2017 12:42 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi John, Bruno,

See attached. I had questions on the loan vs revolver split, and consistency of numbers.

Ron

From: Gavin He
Sent: March-07-17 15:29
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
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Subject: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the briefing note and directives for the credit facility between OEFC and IESO for your review and comments.

Thanks,
Gavin He

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To: [Salman Qadir](#); [Gavin He](#)
Cc: [John Kim](#); [Bruno Amara](#)
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal
Date: Wednesday, March 29, 2017 5:01:04 PM

Hi Salman,

How about some tweaks:

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Cc: [John Kim](#); [Bruno Amara](#)
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal
Date: Wednesday, March 29, 2017 4:44:18 PM
Attachments: [01 - IESO-OEFC - Loan and Line of Credit Renewal - BN v9.doc](#)
[03 - IESO-OEFC - Loan and Line of Credit Renewal - Memo-DM-Min v3.doc](#)

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Gavin He

EXTENSION OF LOAN AND CREDIT AGREEMENT FOR THE INDEPENDENT ELECTRICITY SYSTEM OPERATOR (“IESO”)

The IESO has requested that the Ontario Electricity Financial Corporation (“OEFC”) provide three-year extensions and increases for its two current outstanding credit agreements (“Agreements”):

- (1) Loan Agreement, originally dated April 1, 1999; and
- (2) Revolving Line of Credit (“Revolving Credit”) Agreement originally dated April 23, 2010.

The current Agreements are set to expire on April 30, 2017.

- The OEFC seeks Directives from the Minister of Finance to extend loan and credit facilities. The Directives are sought before April 10, 2017, so that the OEFC and IESO can finalize and execute the respective agreements.

RECOMMENDATION

- Staff recommend providing a Loan agreement and a Revolving Credit agreement:
 - o A loan principal amount of \$120 million (increase from the current \$90 million loan) to meet IESO's forecast of funding needs for capital expenditures.
 - o A revolving credit facility of up to \$160 million (an increase from the current \$95 million credit limit) to provide the IESO flexibility to meet its changing funding needs over the term of the agreement and to provide additional short-term borrowing room if required.
 - o For the term, for both agreements, beginning May 1, 2017, and expiring June 30, 2020 (approximately a 3-year term).
 - o Maintaining the 50 basis point spread on both agreements as the spread is a debt guarantee fee cost that the OEFC incurs on any outstanding debt it borrows from the Province and pays annually to the Minister of Finance.

CONSIDERATIONS

- One of the objects of the OEFC is to provide financial assistance to Ontario Hydro successor companies, of which the IESO is one.
- Based on the IESO request and its projected cash flow requirements, the IESO will have a need for approximately \$280 million over the next 3-5 years.
 - o The IESO has requested that this requirement be financed through the extension of its two existing agreements, \$120 million under the fixed-rate loan agreement and \$160 million under the revolving credit facility agreement.
- The Market Renewals program, which will increase the IESO's capital expenditures, is the driving force behind the increase in borrowing requirements. As the program is currently being finalized, projections may change and a 3-year term compared to a

5-year term on the agreements will allow the IESO to refinance when the borrowing requirements related to the Market Renewal program can be better estimated.

- The IESO has stated that the majority of the request to increase the debt is related to the Market Renewals program, which is currently under review by the Ministry of Energy. The timing of cash flows related to this program is still subject to change and the projections IESO has provided to support the current request are based on the best information available to them.
- Based on cash flow projections, in addition to the existing \$90 million loan, the IESO will have a need for approximately \$13 million in 2017, \$31 million in 2018 and \$46 million in 2019, for financing additional capital expenditures, primarily related to the implementation of the Market Renewals program.
 - o As the majority of this increase is related to the Market Renewals program which is still under review, the IESO has elected to request borrowing an additional \$30 million (in addition to the existing \$90 million) increasing the fixed loan to \$120 million under the fixed rate loan agreement.
 - o The IESO will be able to draw on the line of credit should any additional needs arise in the later part of the 3-year loan term. (See cash flow projections table below.)
 - o The Market Renewals program expenses are capital in nature and will likely increase in the next 5-years as the program is fully implemented. Total financing for capital expenditures will increase to \$180 million by 2020.
 - o Although a fixed rate loan would be recommended for financing capital expenditures, it would be unfavourable for IESO to borrow (and the OEFC to borrow and on-lend) and pay interest on the \$180 million while only utilizing an estimated \$103 million in 2017 and \$134 million in 2018.
 - o The tables below outline the cash flow projections and debt requirements under the facilities of the Agreements:

Note Payable (Capex Debt)	2017	2018	2019	2020
Beginning	90	103	134	180
Capex Requirement	13	31	46	31
Ending	103	134	180	211
Note Payable Outstanding Balances	120	120	120	120
Additional Drawdown on Revolving Line of Credit	0	14	60	91

Revolving Line of Credit	2017	2018	2019	2020
Cash Balance, Beginning	40	2	-34	-55
Operating Requirement	-38	-36	-21	-14
Cash Balance, Ending	2	-34	-55	-69
Drawdown under Revolving Line of Credit	0	34	55	69
<i>Additional Drawdown (Capex Debt)</i>	<i>0</i>	<i>14</i>	<i>60</i>	<i>91</i>
Revolver Requirement	0	48	115	160

- o As illustrated above, the IESO may utilize the line of credit to finance capital costs in the later years of the term.
- o Should there be any outstanding balance on the line of credit at the end of the term, the IESO would shift the expenses to the fixed-rate loan agreement when the agreements are renewed in 2020.
- The term of the Loan agreement and the Revolving Credit agreement will be slightly longer than 3 years. The IESO has requested that the Agreements expire on June 30, 2020, primarily for logistical reasons to avoid increased activity around the Province's March 31 year-end. A June expiry date also aligns with the IESO's timing for finalizing and seeking OEB approvals for its revenue rates.
- The interest rates proposed for the loan and the credit facility would be set to recover the OEFC's cost of borrowing, which is the Province of Ontario's direct cost of borrowing for a three-year and for a one month term, respectively, plus a 50 basis point spread to cover costs.
- The IESO had requested a reduction in the spread from 50 basis points to 25 basis points, which is not recommended at this time.
 - o Reducing the spread would result in a loss to the OEFC, as it would continue to be obligated to pay the 50 basis point spread to the Minister of Finance, under the *Electricity Act, 1998*.
 - o As per *Regulation 115/99* under the *Electricity Act, 1998*, OEFC must pay the Minister of Finance an annual fee equal to 0.50 per cent of the sum of principal outstanding of all indebtedness of the OEFC on March 31 of each fiscal year.¹
 - o If the regulation were to be amended in the future, OEFC could contemplate changing the interest rate spread charged on future facilities.
 - o Under the OFA credit facility to the IESO, a 25 basis point spread is charged. The OFA does not pay a 50 basis points debt guarantee fee to the Province.

IESO Fixed-Rate Loan Agreement

- At January 31, 2017, the IESO maintained the balance of \$90 million under its loan agreement.
- The IESO is requesting this loan be increased to \$120 million.
- The interest rate on this facility will be the Province's Cost of Funds plus a 50 basis point spread.
- The increase is related to current capital expenditures and expected expenditures related to the Market Renewals program.
- Current capital expenditures include maintenance and upgrade of market system and applications and infrastructure. It excludes any large capital expenditures such as acquisition of buildings and land.

¹ Regulation 115/99, section 4(4), <https://www.ontario.ca/laws/regulation/990115>

- o The Ontario Energy Board requires that the IESO expense its capital expenditures in the year they occur and the fixed-rate loan agreement serves as a tool to amortize those expenses over a 3-7 year period.

IESO Revolving Credit Agreement

- At January 31, 2017, the IESO had no outstanding balance on the \$95 million revolving credit facility.
- The IESO is requesting this loan be increased to \$160 million.
- The interest rate on this facility will be the Province's Cost of Funds plus a 50 basis point spread.
- The credit facility will be used to finance any short-term operating and working capital needs. The IESO has a separate credit facility with the OFA which provides short-term financing for market-related transactions such as financing variance accounts and could potentially use that credit facility to finance the GA smoothing proposal on a short-term basis.
- The IESO will also be using the credit facility to finance capital costs related to the Market Renewals program as they are incurred once the proceeds from the fixed-rate loan agreement have been utilized.

BACKGROUND

- The IESO is a not-for-profit corporate entity established in by the *Electricity Act, 1988*. It is governed by an independent Board of Directors and its Chair and Directors are appointed by the Province.
- The IESO has full statute-based authority for establishing, monitoring and enforcing reliability standards in the province. All the companies that make up the power system in Ontario must meet the IESO's standards.
- Its fees and licences to operate are set by the Ontario Energy Board and it operates independently of all other participants in the electricity market.
- On May 1, 2013, the OEFC refinanced a loan to the IESO for \$78.2 million for a term of one year. The original debt was issued to the OEFC in 1999 as part of the electricity market restructuring in exchange for the assets transferred to the IESO.
 - o In April 2014, the IESO refinanced the fixed-rate loan agreement while increasing the principal amount to \$90 million with a maturity date of April 30, 2017.
- The revolving credit facility has been in existence since April 30, 2010. The initial credit facility was \$60 million but was increased to \$110 million in 2011 at the request of IESO.
 - o In April 2014, the IESO refinanced the revolving credit facility while decreasing the credit amount to \$95 million with a maturity date of April 30, 2017.

- Prior to 2010, the IESO had a revolving line of credit provided by TD Bank at a higher cost of borrowing. Having OEFC provide the financings allowed IESO to reduce its cost of borrowing and, therefore, reduce costs to electricity ratepayers.

Corporate & Electricity Finance Division / Ontario Financing Authority

March 22, 2017

Ministry of Finance

Office of the
Deputy Minister

Frost Building South
7 Queen's Park Cr
Toronto ON M7A 1Y7
Tel (416) 325-1590
Fax (416) 325-1595

Ministère des Finances

Bureau du
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Édifice Frost sud
7 Queen's Park Cr
Toronto ON M7A 1Y7
Tél (416) 325-1590
Téléc (416) 325-1595



MEMORANDUM TO: The Honourable Charles Sousa
Minister of Finance

FROM: Scott Thompson
Deputy Minister

SUBJECT: **Minister's Directives to the OEFC to Provide a Loan and
a Revolving Credit Facility Extension to the IESO**

Attached for your review and signature, as recommended by staff, are Minister's Directives to direct the Ontario Electricity Financial Corporation (OEFC) to continue to provide both a loan and a revolving credit facility to the Independent Electricity System Operator (IESO).

OEFC's mandate includes providing financial assistance to Ontario Hydro successor companies, which includes the IESO.

The IESO has requested that the loan agreement and the revolving credit agreement be extended from the current expiry date of April 30, 2017 to June 30, 2020 (approximately 3-year term), with the loan amount increasing to \$120 million (currently \$90 million) and the revolving credit agreement increasing to \$160 million (currently \$95 million) in order to provide it with flexibility meeting its future cash requirements.

The extension and increase in the loan and revolving credit facility would support the IESO's short and medium term funding needs related to the implementation of its Market Renewals program and provide the IESO with flexibility to manage anticipated and unanticipated changes in funding needs.

Attached is a briefing note for your consideration, as well as Directives for your signature. Staff are available to answer any questions you may have regarding this matter.

Scott Thompson

Attachments

- c. Gadi Mayman
- Ronald Kwan

From: [Ronald Kwan](#)
To: [Gavin He](#)
Cc: [John Kim](#); [Bruno Amara](#); [Salman Qadir](#)
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal
Date: Wednesday, March 29, 2017 4:33:24 PM

Hi,

Can we add that point to the BN instead, and not to the memo?

Thanks,
Ron

From: Gavin He
Sent: March-29-17 16:27
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the updated IESO BN and Memo for your review.

EFB has accepted your edits on the BN and has no further edits. For the memo, EFB added additional language for your consideration. These facilities are meant to support IESO's corporate needs (working capital and capex) and any transactions that involve market activities (variances accounts etc.) would be financed through the \$975 credit facility IESO has with the OFA. It is possible that IESO could use the \$975 facility for GA smoothing, subject to review.

Thanks,
Gavin He

From: Gavin He
Sent: Monday, March 20, 2017 5:13 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the updated BN on IESO loan agreements for your review. EFB has addressed your comments from your previous review.

Thanks,
Gavin He

From: Ronald Kwan
Sent: Monday, March 13, 2017 12:42 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi John, Bruno,

See attached. I had questions on the loan vs revolver split, and consistency of numbers.

Ron

From: Gavin He
Sent: March-07-17 15:29
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the briefing note and directives for the credit facility between OEFC and IESO for your review and comments.

Thanks,
Gavin He

From: [Gavin He](#)
To: [Ronald Kwan](#)
Cc: [John Kim](#); [Bruno Amara](#); [Salman Qadir](#)
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal
Date: Wednesday, March 29, 2017 4:27:23 PM
Attachments: [01 - IESO-OEFC - Loan and Line of Credit Renewal - BN v9.doc](#)
[03 - IESO-OEFC - Loan and Line of Credit Renewal - Memo-DM-Min v2.doc](#)

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Subject: IESO-OEFC - Loan and Line of Credit Renewal

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Please find attached the briefing note and directives for the credit facility between OEFC and IESO for your review and comments.

Thanks,
Gavin He

EXTENSION OF LOAN AND CREDIT AGREEMENT FOR THE INDEPENDENT ELECTRICITY SYSTEM OPERATOR (“IESO”)

The IESO has requested that the Ontario Electricity Financial Corporation (“OEFC”) provide three-year extensions and increases for its two current outstanding credit agreements (“Agreements”):

- (1) Loan Agreement, originally dated April 1, 1999; and
- (2) Revolving Line of Credit (“Revolving Credit”) Agreement originally dated April 23, 2010.

The current Agreements are set to expire on April 30, 2017.

- The OEFC seeks Directives from the Minister of Finance to extend loan and credit facilities. The Directives are sought before April 10, 2017, so that the OEFC and IESO can finalize and execute the respective agreements.

RECOMMENDATION

- Staff recommend providing a Loan agreement and a Revolving Credit agreement:
 - o A loan principal amount of \$120 million (increase from the current \$90 million loan) to meet IESO's forecast of funding needs for capital expenditures.
 - o A revolving credit facility of up to \$160 million (an increase from the current \$95 million credit limit) to provide the IESO flexibility to meet its changing funding needs over the term of the agreement and to provide additional short-term borrowing room if required.
 - o For the term, for both agreements, beginning May 1, 2017, and expiring June 30, 2020 (approximately a 3-year term).
 - o Maintaining the 50 basis point spread on both agreements as the spread is a debt guarantee fee cost that the OEFC incurs on any outstanding debt it borrows from the Province and pays annually to the Minister of Finance.

CONSIDERATIONS

- One of the objects of the OEFC is to provide financial assistance to Ontario Hydro successor companies, of which the IESO is one.
- Based on the IESO request and its projected cash flow requirements, the IESO will have a need for approximately \$280 million over the next 3-5 years.
 - o The IESO has requested that this requirement be financed through the extension of its two existing agreements, \$120 million under the fixed-rate loan agreement and \$160 million under the revolving credit facility agreement.
- The Market Renewals program, which will increase the IESO's capital expenditures, is the driving force behind the increase in borrowing requirements. As the program is currently being finalized, projections may change and a 3-year term compared to a

5-year term on the agreements will allow the IESO to refinance when the borrowing requirements related to the Market Renewal program can be better estimated.

- The IESO has stated that the majority of the request to increase the debt is related to the Market Renewals program, which is currently under review by the Ministry of Energy. The timing of cash flows related to this program is still subject to change and the projections IESO has provided to support the current request are based on the best information available to them.
- Based on cash flow projections, in addition to the existing \$90 million loan, the IESO will have a need for approximately \$13 million in 2017, \$31 million in 2018 and \$46 million in 2019, for financing additional capital expenditures, primarily related to the implementation of the Market Renewals program.
 - o As the majority of this increase is related to the Market Renewals program which is still under review, the IESO has elected to request borrowing an additional \$30 million (in addition to the existing \$90 million) increasing the fixed loan to \$120 million under the fixed rate loan agreement.
 - o The IESO will be able to draw on the line of credit should any additional needs arise in the later part of the 3-year loan term. (See cash flow projections table below.)
 - o The Market Renewals program expenses are capital in nature and will likely increase in the next 5-years as the program is fully implemented. Total financing for capital expenditures will increase to \$180 million by 2020.
 - o Although a fixed rate loan would be recommended for financing capital expenditures, it would be unfavourable for IESO to borrow (and the OEFC to borrow and on-lend) and pay interest on the \$180 million while only utilizing an estimated \$103 million in 2017 and \$134 million in 2018.
 - o The tables below outline the cash flow projections and debt requirements under the facilities of the Agreements:

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Beginning	90	103	134	180
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Note Payable Outstanding Balances	120	120	120	120
Additional Drawdown on Revolving Line of Credit	0	14	60	91

Revolving Line of Credit	2017	2018	2019	2020
Cash Balance, Beginning	40	2	-34	-55
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Revolver Requirement	0	48	115	160

- o As illustrated above, the IESO may utilize the line of credit to finance capital costs in the later years of the term.
- o Should there be any outstanding balance on the line of credit at the end of the term, the IESO would shift the expenses to the fixed-rate loan agreement when the agreements are renewed in 2020.
- The term of the Loan agreement and the Revolving Credit agreement will be slightly longer than 3 years. The IESO has requested that the Agreements expire on June 30, 2020, primarily for logistical reasons to avoid increased activity around the Province's March 31 year-end. A June expiry date also aligns with the IESO's timing for finalizing and seeking OEB approvals for its revenue rates.
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- The IESO had requested a reduction in the spread from 50 basis points to 25 basis points, which is not recommended at this time.
 - o Reducing the spread would result in a loss to the OEFC, as it would continue to be obligated to pay the 50 basis point spread to the Minister of Finance, under the *Electricity Act, 1998*.
 - o As per *Regulation 115/99* under the *Electricity Act, 1998*, OEFC must pay the Minister of Finance an annual fee equal to 0.50 per cent of the sum of principal outstanding of all indebtedness of the OEFC on March 31 of each fiscal year.¹
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IESO Fixed-Rate Loan Agreement

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- The IESO will also be using the credit facility to finance capital costs related to the Market Renewals program as they are incurred once the proceeds from the fixed-rate loan agreement have been utilized.

BACKGROUND

- The IESO is a not-for-profit corporate entity established in by the *Electricity Act, 1988*. It is governed by an independent Board of Directors and its Chair and Directors are appointed by the Province.
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- On May 1, 2013, the OEFC refinanced a loan to the IESO for \$78.2 million for a term of one year. The original debt was issued to the OEFC in 1999 as part of the electricity market restructuring in exchange for the assets transferred to the IESO.
 - o In April 2014, the IESO refinanced the fixed-rate loan agreement while increasing the principal amount to \$90 million with a maturity date of April 30, 2017.
- The revolving credit facility has been in existence since April 30, 2010. The initial credit facility was \$60 million but was increased to \$110 million in 2011 at the request of IESO.
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- Prior to 2010, the IESO had a revolving line of credit provided by TD Bank at a higher cost of borrowing. Having OEFC provide the financings allowed IESO to reduce its cost of borrowing and, therefore, reduce costs to electricity ratepayers.

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MEMORANDUM TO: The Honourable Charles Sousa
Minister of Finance

FROM: Scott Thompson
Deputy Minister

SUBJECT: **Minister's Directives to the OEFC to Provide a Loan and
a Revolving Credit Facility Extension to the IESO**

Attached for your review and signature, as recommended by staff, are Minister's Directives to direct the Ontario Electricity Financial Corporation (OEFC) to continue to provide both a loan and a revolving credit facility to the Independent Electricity System Operator (IESO).

OEFC's mandate includes providing financial assistance to Ontario Hydro successor companies, which includes the IESO.

The IESO has requested that the loan agreement and the revolving credit agreement be extended from the current expiry date of April 30, 2017 to June 30, 2020 (approximately 3-year term), with the loan amount increasing to \$120 million (currently \$90 million) and the revolving credit agreement increasing to \$160 million (currently \$95 million) in order to provide it with flexibility meeting its future cash requirements.

The extension and increase in the loan and revolving credit facility would support the IESO's short and medium term funding needs related to the implementation of its Market Renewals program and provide the IESO with flexibility to manage anticipated and unanticipated changes in corporate funding needs. The IESO has a separate credit facility with the OFA which provides short-term financing for market-related transactions such as variance accounts and potentially the GA smoothing proposal.

Attached is a briefing note for your consideration, as well as Directives for your signature. Staff are available to answer any questions you may have regarding this matter.

Scott Thompson

Attachments

c. Gadi Mayman
Ronald Kwan

Commented [RK1]: Can we say that it is not intended for the GA smoothing initiative?

Would IESO be able to use it for short term GA smoothing financing, if necessary?

From: [Ronald Kwan](#)
To: [Salman Qadir](#); [Gavin He](#)
Cc: [John Kim](#); [Bruno Amara](#)
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal
Date: Wednesday, March 29, 2017 5:03:14 PM

Thanks Salman.

Ron

From: Salman Qadir
Sent: March-29-17 17:03
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Definitely reads better. I'll update the note.

Salman

From: Ronald Kwan
Sent: Wednesday, March 29, 2017 5:01 PM
To: Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Salman,

How about some tweaks:

*The IESO **also** has a separate credit facility with the OFA **that** provides short-term financing for market-related transactions such as financing variance accounts, and **it** could potentially use that credit facility to **manage** short-term timing differences, if any, in implementing the **proposed** GA smoothing.*

From: Salman Qadir
Sent: March-29-17 16:44
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Not a problem. I've added it to the note under the heading that covers details of the line of credit:
The IESO has a separate credit facility with the OFA which provides short-term financing for market-related transactions such as financing variance accounts and could potentially use that credit facility to finance the GA smoothing proposal on a short-term basis.

<Z:\Users\CEF\Hydro 2017\IESO\Financing\IESO-OEFC Line of Credit\OFA Package>

Please see attached.
Salman

From: Ronald Kwan
Sent: Wednesday, March 29, 2017 4:33 PM
To: Gavin He <Gavin.He@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
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Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the updated IESO BN and Memo for your review.

EFB has accepted your edits on the BN and has no further edits. For the memo, EFB added additional language for your consideration. These facilities are meant to support IESO's corporate needs (working capital and capex) and any transactions that involve market activities (variances accounts etc.) would be financed through the \$975 credit facility IESO has with the OFA. It is possible that IESO could use the \$975 facility for GA smoothing, subject to review.

Thanks,

Gavin He

From: Gavin He
Sent: Monday, March 20, 2017 5:13 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the updated BN on IESO loan agreements for your review. EFB has addressed your comments from your previous review.

Thanks,
Gavin He

From: Ronald Kwan
Sent: Monday, March 13, 2017 12:42 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: IESO-OEFC - Loan and Line of Credit Renewal

Hi John, Bruno,

See attached. I had questions on the loan vs revolver split, and consistency of numbers.

Ron

From: Gavin He
Sent: March-07-17 15:29
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: IESO-OEFC - Loan and Line of Credit Renewal

Hi Ron,

Please find attached the briefing note and directives for the credit facility between OEFC and IESO for your review and comments.

Thanks,
Gavin He

From: [Kim Marshall](#)
To: [Ronald Kwan](#)
Subject: RE: OFA FH credit request - draft letter
Date: Monday, May 01, 2017 9:29:04 AM

Yes thank you, what number can I reach you at?

Kimberly Marshall | VP, Corporate Services & CFO
Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
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LinkedIn: [saveONenergy/linkedin.com](https://www.linkedin.com/company/saveONenergy)

From: Ronald Kwan [mailto:Ronald.Kwan@ofina.on.ca]
Sent: May 01, 2017 9:28 AM
To: Kim Marshall
Subject: RE: OFA FH credit request - draft letter

Hi Kim,

Would this afternoon at 2:30 work for you?

Ron

From: Kim Marshall [mailto:Kim.Marshall@ieso.ca]
Sent: May-01-17 07:59
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: FW: OFA FH credit request - draft letter

Ron can we pls have a quick 10min call re the IESO credit facility and next steps. I am following up while Anthony is away this week. Let me know when works. Thanks

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From: Anthony Martinello
Sent: April 30, 2017 10:32 AM
To: Kim Marshall
Subject: Re: OFA FH credit request - draft letter

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From: Kim.Marshall@ieso.ca
Sent: April 30, 2017 10:02 AM
To: Anthony.Martinello@ieso.ca
Subject: Re: OFA FH credit request - draft letter

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Sent from my iPhone

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Also, see last Oct 2016 letter on \$975 renewal request.

Regards.

<mime-attachment>

<IESO_OFA FEP 2017 Credit Letter v1.docx>

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From: [Ronald Kwan](#)
To: ["Kim Marshall"](#)
Subject: RE: OFA FH credit request - draft letter
Date: Monday, May 01, 2017 9:27:57 AM

Hi Kim,

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Ron

From: Kim Marshall [mailto:Kim.Marshall@ieso.ca]
Sent: May-01-17 07:59
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
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From: [Ronald Kwan](#)
To: ["Kim Marshall"](#)
Subject: RE: OFA FH credit request - draft letter
Date: Monday, May 01, 2017 9:29:40 AM

Hi Kim,

416-325-0909.

Ron

From: Kim Marshall [mailto:Kim.Marshall@ieso.ca]
Sent: May-01-17 09:29
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
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From: [Anthony Martinello](#)
To: [Kim Marshall](#); [Ronald Kwan](#); [Michael Boll](#); [Mike Manning](#); [Ken Kandeepan](#); [Victor Buza](#)
Subject: RE: OFA : IESO - Fair Hydro funding call April 28
Date: Thursday, April 27, 2017 9:50:11 AM

Two additional items to consider to support #1 below:

- The proposed FH target is 25% (including OREC 8%) after-tax reduction on a representative consumer bill – there are items on a bill that may increase during the FH program which may mean the FH reductions needs to be larger in order to achieve the target (so the monthly IESO shortfall may be larger than planned);
- The proposed FH plan has that the IESO will be paying the OPGTrust admin/vendor costs plus any FH interest costs (all of which are expected to be added to the FH asset) – also these amounts will not be recovered until post 2022.

Regards.

From: Anthony Martinello
Sent: April 26, 2017 11:06 AM
To: Kim Marshall; Ronald Kwan; Michael Boll; Mike Manning; Ken Kandeepan; Victor Buza
Subject: OFA : IESO - Fair Hydro funding call April 28

Proposed Agenda for Friday's discussions:

1.

IESO's need to have \$ commitment for funding Fair Hydro shortfalls – we can discuss the quantum during the call

Background to support the \$ commitment's rationale:

- Fair Hydro plan propose to lower bills for the next 4 years – with no recovery until post 2022;
- OPG has no requirement to purchase from the IESO;
- For any purchases made, OPG may need a timing delay (liquidity, alignment for investors timing etc.) – may be one or two months after IESO settles the Fair Hydro shortfall each month;
- The monthly Fair Hydro amounts will continue to have +/- forecast variance amounts (these are expected to be funded by IESO, same as RPP today) and the OEB will consider these variances for each FH rate setting

2.

The current \$975M OFA-IESO credit facility may be utilized to include the Fair Hydro funding commitment

Background:

- The current \$975M includes a component for today's RPP shortfalls – so this amount can be

reduced or transformed into the Fair Hydro commitment;

- Looking for more flexibility on the current minimum 28 day borrowing period,.. if OPG buys from IESO would like IESO to pay down the debt as soon as possible;
- Moody's (IESO rating) will be examining if IESO has sufficient capacities to fund FH;
- Examine material adverse clause to accommodate FH

3.

IESO to examine whether O.Reg 280/14 needs to be updated for Fair Hydro – if so, will need IESO Board and Minister of Finance's approvals;

Regards.

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From: [Ronald Kwan](#)
To: [Ken Kandeepan](#)
Cc: [Gadi Mayman](#); [Mike Manning](#); [Anna Strathy](#); [Gavin He](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 11:07:15 AM
Attachments: [image001.png](#)

Hi Ken,

Sure. IESO is setting up a call for Tuesday afternoon, likely 2:30.

Ron

From: Ken Kandeepan
Sent: April-13-17 10:54
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Gadi Mayman <Gadi.Mayman@ofina.on.ca>
Subject: RE: OFA : IESO

Thanks, Ron, can you pls include me in the IESO credit needs meeting, since Cindy and I are having a number of discussions, with and without OPG, on developing a comprehensive accounting model for the GA smoothing, I need to be aware of all potential impacts to the model.

Thanks

Ken K

From: Gadi Mayman
Sent: Thursday, April 13, 2017 10:47 AM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>
Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: Re: OFA : IESO

Thanks, this came up at this morning's rate mitigation meeting, and the IESO people were happy to hear that we're on this, as they're a little nervous about how they're going to finance the regulatory asset until OPG is set up to take it on and pay for it.

I'm adding Ken to close the loop on the exchange that we had last night about the OPG letter - I asked Serge to add in the OFA, and he instructed Steen to do so, and, yes, the letter will be posted, at some point, on OPG's website.

In the half hour that I was able to attend the meeting, the discussion was around the legislation. The biggest point of contention was about OPG's need to have a direct recourse to

ratepayers, and the legislative need for a thread directly from individual ratepayers to the lenders to the GA smoothing. The OEB doesn't like that concept at all. The other point that is of interest to us is that they are not looking at putting the guarantee mechanism into the legislation - although there will be some description in the legislation about what, I think they called indemnification will be needed, and then they will leave the guarantee to a commercial one. No surprise that OPG's dealer advisors are saying they need a full provincial guarantee, which OPG is pushing back on, and saying that the guarantee can only be if a future government changes the value of the regulatory asset (this is where the indemnification language in the legislation is necessary). Cindy, of course, as well as me for different reasons, is fussed about the nature of that guarantee, so we asked if they could sort that out with the dealers before the legislation is tabled. We don't want to end up with the dealers holding OPG hostage six months from now - not that they'd ever do that, would they Mike 😊
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I'm sure Scott will send out his fuller synopsis later today, and that'll also cover what happened in the last hour, after I'd left.

Gadi

From: Ronald Kwan
Sent: Thursday, April 13, 2017 8:37:54 AM
To: Gadi Mayman
Cc: Mike Manning; Anna Strathy; Gavin He
Subject: Re: OFA : IESO

Hi Gadi,

Will do.

Ron

On Apr 13, 2017, at 8:00 AM, Gadi Mayman <Gadi.Mayman@ofina.on.ca> wrote:

Hi Mike and Ron, could one of you please get back to Anthony and handle this?

Thanks,
Gadi

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

Mr. Mayman,

Kim and I would like to set up a 30min call with you to discuss the proposed Fair Hydro rollout and the potential impact on the IESO credit needs.

Would you be available next week/preferred date? Let me know and I will send out a meeting invite.

Regards

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From: [Ronald Kwan](#)
To: [Gadi Mayman](#)
Cc: [Mike Manning](#); [Anna Strathy](#); [Gavin He](#); [Ken Kandeepan](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 11:06:24 AM
Attachments: [image001.png](#)

Hi Gadi,

All very interesting.

On one point, how would a thread directly from individual ratepayers to the lenders to the GA smoothing work? That would seem particularly challenging.

Ron

From: Gadi Mayman
Sent: April-13-17 10:47
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>
Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
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From: [Mike Manning](#)
To: ["Kim Marshall"](#); [Ronald Kwan](#); [Anthony Martinello](#)
Cc: [Michael Boll](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 10:42:15 AM

Tuesday at 2:30 would work best for me.

Mike

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: Thursday, April 13, 2017 10:37 AM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Anthony Martinello <Anthony.Martinello@ieso.ca>
Cc: Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>
Subject: RE: OFA : IESO

Apologies, can we pls plan to do this tues or wed after 2:30?

Kimberly Marshall | VP, Corporate Services & CFO
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From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April 13, 2017 10:22 AM
To: Anthony Martinello
Cc: Kim Marshall; Michael Boll; Mike Manning
Subject: RE: OFA : IESO

Hi Anthony,

Gadi asked if Mike and I could get back to you on this. When would be a good time for you for a call. I'm free this morning until about 11:45.

Regards,
Ron

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Cc: Kim Marshall; Michael Boll

Subject: OFA : IESO

Mr. Mayman,

Kim and I would like to set up a 30min call with you to discuss the proposed Fair Hydro rollout and the potential impact on the IESO credit needs.

Would you be available next week/preferred date? Let me know and I will send out a meeting invite.

Regards

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From: [Kim Marshall](#)
To: [Ronald Kwan](#); [Anthony Martinello](#)
Cc: [Michael Boll](#); [Mike Manning](#); [Georgia Ritchie-Wust](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 10:40:32 AM

By cc to Georgia can you pls set up a conf call.

Anthony – can you provide an email for tues with some of our thoughts?

Kimberly Marshall | VP, Corporate Services & CFO
Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
Web: www.ieso.ca[\[ieso.ca\]](#) | Twitter: [IESO_Tweets](#)[\[twitter.com\]](#) | LinkedIn: [IESO](#)[\[linkedin.com\]](#)

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Conservation: www.saveONenergy.ca[\[saveONenergy.ca\]](#) | Twitter: [saveONenergyOnt](#)[\[twitter.com\]](#) |
LinkedIn: [saveONenergy](#)[\[linkedin.com\]](#)

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April 13, 2017 10:39 AM
To: Kim Marshall; Anthony Martinello
Cc: Michael Boll; Mike Manning
Subject: RE: OFA : IESO

Hi Kim,

Tuesday would be better for me.

Would you have some materials that you could send us in advance?

Thanks,
Ron

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: April-13-17 10:37
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Anthony Martinello <Anthony.Martinello@ieso.ca>
Cc: Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>
Subject: RE: OFA : IESO

Apologies, can we pls plan to do this tues or wed after 2:30?

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Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
Web: www.ieso.ca[\[ieso.ca\]](#)[\[na01.safelinks.protection.outlook.com\]](#) | Twitter:

[IESO_Tweets\[\[twitter.com\]\(#\)\]\[\[na01.safelinks.protection.outlook.com\]\(#\)\]](#) | LinkedIn: [IESO\[\[linkedin.com\]\(#\)\]\[\[na01.safelinks.protection.outlook.com\]\(#\)\]](#)

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[saveONenergy\[\[linkedin.com\]\(#\)\]\[\[na01.safelinks.protection.outlook.com\]\(#\)\]](#)

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April 13, 2017 10:22 AM
To: Anthony Martinello
Cc: Kim Marshall; Michael Boll; Mike Manning
Subject: RE: OFA : IESO

Hi Anthony,

Gadi asked if Mike and I could get back to you on this. When would be a good time for you for a call. I'm free this morning until about 11:45.

Regards,
Ron

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

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From: [Ronald Kwan](#)
To: ["Kim Marshall"](#); [Anthony Martinello](#)
Cc: [Michael Boll](#); [Mike Manning](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 10:39:19 AM

Hi Kim,

Tuesday would be better for me.

Would you have some materials that you could send us in advance?

Thanks,
Ron

From: Kim Marshall [mailto:Kim.Marshall@ieso.ca]
Sent: April-13-17 10:37
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Anthony Martinello <Anthony.Martinello@ieso.ca>
Cc: Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>
Subject: RE: OFA : IESO

Apologies, can we pls plan to do this tues or wed after 2:30?

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LinkedIn: [saveONenergy\[linkedin.com\]](https://www.linkedin.com/company/saveONenergy)

From: Ronald Kwan [mailto:Ronald.Kwan@ofina.on.ca]
Sent: April 13, 2017 10:22 AM
To: Anthony Martinello
Cc: Kim Marshall; Michael Boll; Mike Manning
Subject: RE: OFA : IESO

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From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

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From: [Kim Marshall](#)
To: [Ronald Kwan](#); [Anthony Martinello](#)
Cc: [Michael Boll](#); [Mike Manning](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 10:37:34 AM

Apologies, can we pls plan to do this tues or wed after 2:30?

Kimberly Marshall | VP, Corporate Services & CFO
Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
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LinkedIn: [saveONenergy\[linkedin.com\]](https://www.linkedin.com/company/saveONenergy)

From: Ronald Kwan [mailto:Ronald.Kwan@ofina.on.ca]
Sent: April 13, 2017 10:22 AM
To: Anthony Martinello
Cc: Kim Marshall; Michael Boll; Mike Manning
Subject: RE: OFA : IESO

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From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

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From: [Ronald Kwan](#)
To: ["Anthony.Martinello@ieso.ca"](#)
Cc: ["kim.marshall@ieso.ca"](#); ["Michael.boll@ieso.ca"](#); [Mike Manning](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 10:21:40 AM

Hi Anthony,

Gadi asked if Mike and I could get back to you on this. When would be a good time for you for a call. I'm free this morning until about 11:45.

Regards,
Ron

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

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From: [Mike Manning](#)
To: [Ronald Kwan](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 10:09:58 AM

It would be good to call with you. As you know we have two other facilities that are coming up but don't expect they would be part of the discussion. I think we would need to get an idea of their potential credit needs and then go from there.

Mike

From: Ronald Kwan
Sent: Thursday, April 13, 2017 10:06 AM
To: Mike Manning <Mike.Manning@ofina.on.ca>
Subject: RE: OFA : IESO

Hi Mike,

Did you want to call together? Any issues/questions you'd want to raise?

Ron

From: Ronald Kwan
Sent: April-13-17 08:38
To: Gadi Mayman <Gadi.Mayman@ofina.on.ca>
Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: Re: OFA : IESO

Hi Gadi,

Will do.

Ron

On Apr 13, 2017, at 8:00 AM, Gadi Mayman <Gadi.Mayman@ofina.on.ca> wrote:

Hi Mike and Ron, could one of you please get back to Anthony and handle this?

Thanks,
Gadi

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll

Subject: OFA : IESO

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From: [Ronald Kwan](#)
To: [Mike Manning](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 10:06:16 AM

Hi Mike,

Did you want to call together? Any issues/questions you'd want to raise?

Ron

From: Ronald Kwan
Sent: April-13-17 08:38
To: Gadi Mayman <Gadi.Mayman@ofina.on.ca>
Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: Re: OFA : IESO

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Thanks,
Gadi

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

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From: [Ronald Kwan](#)
To: [Ken Kandeepan](#); [Mike Manning](#)
Cc: [Gavin He](#)
Subject: RE: OFA : IESO
Date: Thursday, April 13, 2017 11:13:55 AM
Attachments: [image001.png](#)

Hi Mike,

Are you available? You had stated a preference for 2:30.

Ron

From: Ken Kandeepan
Sent: April-13-17 11:13
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: OFA : IESO

Thanks Ron, I have IDLC at Frost from 2 to 3Pm is it possible to move this to 3 or 3.30PM.

Thanks again and sorry for the hassle.

Ken k

From: Ronald Kwan
Sent: Thursday, April 13, 2017 11:07 AM
To: Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>
Cc: Gadi Mayman <Gadi.Mayman@ofina.on.ca>; Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: OFA : IESO

Hi Ken,

Sure. IESO is setting up a call for Tuesday afternoon, likely 2:30.

Ron

From: Ken Kandeepan
Sent: April-13-17 10:54
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Gadi Mayman <Gadi.Mayman@ofina.on.ca>
Subject: RE: OFA : IESO

Thanks, Ron, can you pls include me in the IESO credit needs meeting, since Cindy and I are having a

number of discussions, with and without OPG, on developing a comprehensive accounting model for the GA smoothing, I need to be aware of all potential impacts to the model.

Thanks

Ken K

From: Gadi Mayman

Sent: Thursday, April 13, 2017 10:47 AM

To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>

Cc: Mike Manning <Mike.Manning@ofina.on.ca>; Anna Strathy <Anna.Strathy@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>

Subject: Re: OFA : IESO

Thanks, this came up at this morning's rate mitigation meeting, and the IESO people were happy to hear that we're on this, as they're a little nervous about how they're going to finance the regulatory asset until OPG is set up to take it on and pay for it.

I'm adding Ken to close the loop on the exchange that we had last night about the OPG letter - I asked Serge to add in the OFA, and he instructed Steen to do so, and, yes, the letter will be posted, at some point, on OPG's website.

In the half hour that I was able to attend the meeting, the discussion was around the legislation. The biggest point of contention was about OPG's need to have a direct recourse to ratepayers, and the legislative need for a thread directly from individual ratepayers to the lenders to the GA smoothing. The OEB doesn't like that concept at all. The other point that is of interest to us is that they are not looking at putting the guarantee mechanism into the legislation - although there will be some description in the legislation about what, I think they called indemnification will be needed, and then they will leave the guarantee to a commercial one. No surprise that OPG's dealer advisors are saying they need a full provincial guarantee, which OPG is pushing back on, and saying that the guarantee can only be if a future government changes the value of the regulatory asset (this is where the indemnification language in the legislation is necessary). Cindy, of course, as well as me for different reasons, is fussed about the nature of that guarantee, so we asked if they could sort that out with the dealers before the legislation is tabled. We don't want to end up with the dealers holding OPG hostage six months from now - not that they'd ever do that, would they Mike 😊
?

I'm sure Scott will send out his fuller synopsis later today, and that'll also cover what happened in the last hour, after I'd left.

Gadi

From: Ronald Kwan
Sent: Thursday, April 13, 2017 8:37:54 AM
To: Gadi Mayman
Cc: Mike Manning; Anna Strathy; Gavin He
Subject: Re: OFA : IESO

Hi Gadi,

Will do.

Ron

On Apr 13, 2017, at 8:00 AM, Gadi Mayman <Gadi.Mayman@ofina.on.ca> wrote:

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Thanks,
Gadi

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

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From: [Ronald Kwan](#)
To: [Nadine Petsche \(MOF\)](#)
Cc: [Bharat Patel \(MOF\)](#); [Ken Kandeepan](#); [John Kim](#)
Subject: RE: OFA-IESO loan
Date: Friday, January 20, 2017 7:00:24 PM

Hi Nadine,

I'd rather not speak for the IESO on its market books vs its operating statements. It did seem that it recorded the RPP amounts, including the amounts related to the draws on the OFA credit facility to finance short-term variances, on the market books, not its operating statements.

Perhaps John could recap more, but reaching out to Kim and her staff would be best.

Ron

From: Petsche, Nadine (TBS) [mailto:Nadine.Petsche@ontario.ca]
Sent: January-20-17 18:52
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bharat Patel (MOF) <Bharat.Patel3@ontario.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>
Subject: RE: OFA-IESO loan

Thanks Ronald. Is there something that explains more about the two sets of books? I joined the call late and I'm trying to piece together the comments that were being made on the call. Kim indicated that only debt related to the IESO's operating costs is reflected on the f/s. Additional insight into the two sets of books and how the debt referenced below factors in would be most appreciated.

Thanks in advance.

N

From: Ronald Kwan [mailto:Ronald.Kwan@ofina.on.ca]
Sent: January-20-17 6:12 PM
To: Petsche, Nadine (TBS)
Cc: Patel, Bharat (TBS); Kandeepan, Ken (OFA); Kim, John (OFA)
Subject: RE: OFA-IESO loan

Hi Nadine,

Leaving to Ken to respond on how this is recorded in the OFA, but for your benefit, a few bits of background:

- The IESO has an up to \$975 million credit facility in place with the OFA. This credit facility is part of a series that was originally put in place for the Ontario Power Authority, and helps support its obligations under the regulated price plan.
- It is provided on a revolving basis, with each draw maturing within one, two or three month(s).
- The interest rate charged on any balance of the credit facility is equal to the Province's cost of borrowing for a similar term, plus 25 basis points.

- In the last five years, the IESO has had an outstanding amount as high as \$280 million in February 2013 under this credit facility.
- Recent IESO draws have included approximately \$95 million under the facility on August 19, 2016, which was repaid on September 19, 2016, approximately \$46 million on September 19, 2016, repaid on October 19, 2016 and \$15.4 million on October 19, 2016, repaid November 30, 2016 (TBC). This is based on a BN from last fall, when a new credit facility was being approved to replace the expiring one. Staff can likely provide information on more recent activity.

This information is for your background information and I hope that it helps provide some context. It may not be in the public domain, so not sure about sharing it more widely.

Ron

From: Petsche, Nadine (TBS) [<mailto:Nadine.Petsche@ontario.ca>]
Sent: January-20-17 17:37
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bharat Patel (MOF) <Bharat.Patel3@ontario.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; John Psinas <John.Psinas@ofina.on.ca>
Subject: FW: OFA-IESO loan

Ronald,
Since you were on today's call, I thought it might be helpful to loop you in on this request as well. N

From: Patel, Bharat (TBS)
Sent: January-20-17 5:13 PM
To: Kandeepan, Ken (OFA); John Psinas
Cc: Petsche, Nadine (TBS); Veinot, Cindy (TBS)
Subject: FW: OFA-IESO loan

Ken/John,

Not sure if you are the right person to ask, but can you please help to get the answer for \$100M RRP program support that OFA provides to IESO? We are interested in how this loan is recorded (i.e. on the books vs. market)? if on the books where? And if market how it works?

Thanks,
Bharat

From: Veinot, Cindy (TBS)
Sent: January-20-17 5:05 PM
To: Patel, Bharat (TBS)
Cc: Petsche, Nadine (TBS)
Subject: FW: OFA-IESO loan

See below – can you see how OFA has this amount recorded – its apparently on the market books.

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January-20-17 3:36 PM
To: Veinot, Cindy (TBS)
Subject: RE: OFA-IESO loan

market

Kimberly Marshall | VP, Corporate Services & CFO
Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
Web: www.ieso.ca/ieso.ca | Twitter: [IESO_Tweets](https://twitter.com/IESO_Tweets) | LinkedIn: [IESO](https://www.linkedin.com/company/ieso)

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LinkedIn: [saveONenergy](https://www.linkedin.com/company/saveONenergy)

From: Veinot, Cindy (TBS) [<mailto:Cindy.Veinot@ontario.ca>]
Sent: January 20, 2017 3:35 PM
To: Kim Marshall
Subject: RE: OFA-IESO loan

*** EXTERNAL email. Please be cautious and evaluate before you click on links, open attachments, or provide credentials. ***

Thanks – is this loan recorded on the accounting books (vs. the market books?)

Cindy

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January-20-17 3:32 PM
To: Veinot, Cindy (TBS)
Subject: OFA-IESO loan

Cindy, the IESO currently has a monthly payable to the OFA. Right now it is in the 100million range support the rpp program. Not sure how that is currently treated by the OFA. thanks

Kimberly Marshall | VP, Corporate Services & CFO
Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
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From: [Ronald Kwan](#)
To: [Nadine Petsche \(MOF\)](#)
Cc: [Bharat Patel \(MOF\)](#); [Ken Kandeepan](#); [John Kim](#)
Subject: RE: OFA-IESO loan
Date: Friday, January 20, 2017 6:11:37 PM

Hi Nadine,

Leaving to Ken to respond on how this is recorded in the OFA, but for your benefit, a few bits of background:

- The IESO has an up to \$975 million credit facility in place with the OFA. This credit facility is part of a series that was originally put in place for the Ontario Power Authority, and helps support its obligations under the regulated price plan.
- It is provided on a revolving basis, with each draw maturing within one, two or three month(s).
- The interest rate charged on any balance of the credit facility is equal to the Province's cost of borrowing for a similar term, plus 25 basis points.
 - In the last five years, the IESO has had an outstanding amount as high as \$280 million in February 2013 under this credit facility.
 - Recent IESO draws have included approximately \$95 million under the facility on August 19, 2016, which was repaid on September 19, 2016, approximately \$46 million on September 19, 2016, repaid on October 19, 2016 and \$15.4 million on October 19, 2016, repaid November 30, 2016 (TBC). This is based on a BN from last fall, when a new credit facility was being approved to replace the expiring one. Staff can likely provide information on more recent activity.

This information is for your background information and I hope that it helps provide some context. It may not be in the public domain, so not sure about sharing it more widely.

Ron

From: Petsche, Nadine (TBS) [mailto:Nadine.Petsche@ontario.ca]
Sent: January-20-17 17:37
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bharat Patel (MOF) <Bharat.Patel3@ontario.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; John Psinas <John.Psinas@ofina.on.ca>
Subject: FW: OFA-IESO loan

Ronald,

Since you were on today's call, I thought it might be helpful to loop you in on this request as well. N

From: Patel, Bharat (TBS)
Sent: January-20-17 5:13 PM
To: Kandeepan, Ken (OFA); John Psinas

Cc: Petsche, Nadine (TBS); Veinot, Cindy (TBS)
Subject: FW: OFA-IESO loan

Ken/John,

Not sure if you are the right person to ask, but can you please help to get the answer for \$100M RRP program support that OFA provides to IESO? We are interested in how this loan is recorded (i.e. on the books vs. market)? if on the books where? And if market how it works?

Thanks,
Bharat

From: Veinot, Cindy (TBS)
Sent: January-20-17 5:05 PM
To: Patel, Bharat (TBS)
Cc: Petsche, Nadine (TBS)
Subject: FW: OFA-IESO loan

See below – can you see how OFA has this amount recorded – its apparently on the market books.

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January-20-17 3:36 PM
To: Veinot, Cindy (TBS)
Subject: RE: OFA-IESO loan

market

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From: Veinot, Cindy (TBS) [<mailto:Cindy.Veinot@ontario.ca>]
Sent: January 20, 2017 3:35 PM
To: Kim Marshall
Subject: RE: OFA-IESO loan

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Thanks – is this loan recorded on the accounting books (vs. the market books?)

Cindy

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January-20-17 3:32 PM
To: Veinot, Cindy (TBS)
Subject: OFA-IESO loan

Cindy, the IESO currently has a monthly payable to the OFA. Right now it is in the 100million range support the rpp program. Not sure how that is currently treated by the OFA. thanks

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From: [Ronald Kwan](#)
To: [Bharat Patel \(MOF\)](#); [Ken Kandeepan](#)
Cc: [John Psinas](#); [Nadine Petsche \(MOF\)](#); [Veinot, Cindy \(TBS\)](#)
Subject: RE: OFA-IESO loan
Date: Friday, January 20, 2017 10:37:10 PM

Hi Bharat,

Thanks for looking into how the two OEFC facilities with IESO are recorded, and agreed that it's important to have IESO explain how it what it records in its operating statements and in its market books.

Did you see where IESO recorded the credit facility from the OFA? A main area of interest discussed at the meeting today was on how the IESO records the Regulated Price Plan amounts, and it's the RPP balances that the OFA credit facility is in place for the IESO to be able to access for financing if it needs to.

Ron

-----Original Message-----

From: Patel, Bharat (TBS) [<mailto:Bharat.Patel3@ontario.ca>]
Sent: January-20-17 7:30 PM
To: Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>
Cc: John Psinas <John.Psinas@ofina.on.ca>; Nadine Petsche (MOF) <Nadine.Petsche@ontario.ca>; Veinot, Cindy (TBS) <Cindy.Veinot@ontario.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: Re: OFA-IESO loan

But all this items are on accounting books. IESO has \$90M loan payable to OEFC and \$95M line of credit see not#6 of IESO f/s.

Cindy,

I don't expect any loan amount would be off the books. This is cash and if they use the market book concept, the question is how they reconciled banks?

May be IESO can revisit it's documents and explain to us how market books vs. Accounting books work from the perspective of IESO.

Thanks,
Bharat

Sent from my BlackBerry 10 smartphone on the Rogers network.
From: Ken Kandeepan
Sent: Friday, January 20, 2017 7:15 PM
To: Patel, Bharat (TBS)
Cc: John Psinas; Petsche, Nadine (TBS); Veinot, Cindy (TBS); Kwan, Ronald (OFA)
Subject: Re: OFA-IESO loan

Sorry one small correction, pls replace OEFC with OFA in my previous email. As Ron pointed out earlier the loan is with the OFA.

Thanks

Ken k

On Jan 20, 2017, at 6:45 PM, Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>[<mailto:Ken.Kandeepan@ofina.on.ca>](mailto:Ken.Kandeepan@ofina.on.ca)>> wrote:

Hi Bharat

Ron has provided details with regard to the loan itself so I will stick to the accounting. The loan is presented as an asset in OEFC's books and financial statements and the interest on the loan is treated as interest revenue. Obviously, the OEFC funds any drawdowns by IESO on the credit facility by borrowing.

Since IESO is also line by line consolidated I was under impression that upon consolidation in the PA the OEFC's asset is eliminated by the IESO loan, however given that the latter is part of IESO's market books I am not sure how the consolidation works.

Hope this is helpful, if you have any questions pls don't hesitate to email or call on my cell 647-202-4373.

Thanks

Ken k

On Jan 20, 2017, at 5:13 PM, Patel, Bharat (TBS) <Bharat.Patel3@ontario.ca>[<mailto:Bharat.Patel3@ontario.ca>](mailto:Bharat.Patel3@ontario.ca)>> wrote:

Ken/John,

Not sure if you are the right person to ask, but can you please help to get the answer for \$100M RRP program support that OFA provides to IESO? We are interested in how this loan is recorded (i.e. on the books vs. market)? if on the books where? And if market how it works?

Thanks,
Bharat

From: Veinot, Cindy (TBS)
Sent: January-20-17 5:05 PM
To: Patel, Bharat (TBS)
Cc: Petsche, Nadine (TBS)
Subject: FW: OFA-IESO loan

See below – can you see how OFA has this amount recorded – its apparently on the market books.

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January-20-17 3:36 PM
To: Veinot, Cindy (TBS)
Subject: RE: OFA-IESO loan

market

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3WVIN3OVI&s=OFQuM39y1dm-V8E8NKFSdvormiaC_jRRg6l-cRCvE7c&e=>

From: Veinot, Cindy (TBS) [<mailto:Cindy.Veinot@ontario.ca>]
Sent: January 20, 2017 3:35 PM
To: Kim Marshall
Subject: RE: OFA-IESO loan

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Thanks – is this loan recorded on the accounting books (vs. the market books?)

Cindy

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January -20-17 3:32 PM
To: Veinot, Cindy (TBS)
Subject: OFA-IESO loan

Cindy, the IESO currently has a monthly payable to the OFA. Right now it is in the 100million range support the rpp program. Not sure how that is currently treated by the OFA. thanks

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From: [Ronald Kwan](#)
To: ["Anthony Martinello"](#); [Kim Marshall](#); [Michael Boll](#); [Mike Manning](#); [Ken Kandeepan](#); [Victor Buza](#)
Subject: RE: OFA-IESO, Fair Hydro next steps
Date: Monday, April 24, 2017 5:47:02 PM

Hi,

The 27th would not work.

Ron

From: Anthony Martinello [mailto:Anthony.Martinello@ieso.ca]
Sent: April-24-17 17:44
To: Kim Marshall <Kim.Marshall@ieso.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; Victor Buza <Victor.Buza@ieso.ca>
Subject: OFA-IESO, Fair Hydro next steps

As the draft Fair Hydro legislation is closer to being finalized.....the legislation is giving more clarity on the IESO's expected funding needs.

I think we should have another call this week to discuss more concrete action items regarding the IESO's funding needs to pay for the Fair Hydro shortfalls/holding regulatory asset amounts.

Please let me know if any of the following times works, afterwhich I will send out an invite:

1hour meeting either:

April 26 2017 4pm

April 27 2017 11am

April 28 2017 2pm

Regards.

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From: [Nelms, Scott \(MOF\)](#)
To: [Ronald Kwan](#)
Subject: RE: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 3:51:22 PM

I think we want to get as much covered off in the TB sub, so if something needs to be included that seems like the right place. As far as I know nothing has been drafted as everything is focused on landing the legislation.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:38 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Understood. And will this be part of the TB Report Back in a couple weeks?

Ron

On Apr 17, 2017, at 3:05 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

If OPG decides it no longer has the ability to purchase the asset permanently, IESO needs a way to finance on a long term basis.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:03 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Thanks. In the latter case, though, would that be assumed not as a temporary situation -- otherwise, why a long term facility?

I would have otherwise assumed it was still a temporary situation.

Ron

On Apr 17, 2017, at 1:30 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

I have yet to see any numbers. I think we are still at the concept level. As you know, OPG will buy the asset from IESO on an ongoing basis. What has yet to be determined is frequency of these transactions, which could be anywhere from weeks to 3 months of delay. Therefore IESO needs a larger credit facility from OFA to meet this temporary shortfall.

In addition, there may be circumstances where OPG does not purchase

the asset (either due to temporary market conditions or overall capacity issues). Therefore IESO needs the capacity to finance these shortfalls until the market recovers or Province decides on a different course of action. I see this as a contingent fund, which only needs to become available in the event one of these circumstances arise.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 10:52 AM
To: Nelms, Scott (MOF)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro

Hi Scott,

I am likely behind the curve on this.

I could see short term financing needs, especially early on perhaps, but long term financing from the OFA (vs OPG'S SPV)?

Why is that arising?

Thanks,
Ron

Begin forwarded message:

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Date: April 16, 2017 at 11:55:08 AM EDT
To: Kim Marshall <Kim.Marshall@ieso.ca>, Ronald Kwan <Ronald.Kwan@ofina.on.ca>, Michael Boll <Michael.Boll@ieso.ca>, Mike Manning <Mike.Manning@ofina.on.ca>, Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>, Victor Buza <Victor.Buza@ieso.ca>
Subject: OFA-IESO, discussion re Fair Hydro

Below are the proposed agenda items for our meeting.

Agenda:

- 1.Draw Amounts
 - IESO may need to fund a) Fair Hydro forecast variances (short term), and b) Fair Hydro amounts not purchased by the OPG SPV (long term);
 - in order to minimize costs and maximize cash-flow flexibility (matching to OPG SPV buys) – any appetite to amending the

current 28 day minimum for draws;

2. IESO's Fair Hydro role

-IESO's credit rating agencies (Moody's Aa2, and DBRS) will examine IESO's credit capacities/solvency – need to update IESO/OFA's credit facilities to remove material adverse effect clauses or similar clauses and acknowledge/agree IESO's role in the Fair Hydro plan and commitment to advance funds under the credit facility if needed for the Fair Hydro cash-flows.

3. General

General comments regarding IESO's Fair Hydro needs vs. IESO regular ongoing needs (corporate and market)

Regards.

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From: [Nelms, Scott \(MOF\)](#)
To: [Ronald Kwan](#)
Subject: RE: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 3:05:52 PM

If OPG decides it no longer has the ability to purchase the asset permanently, IESO needs a way to finance on a long term basis.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:03 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Thanks. In the latter case, though, would that be assumed not as a temporary situation -- otherwise, why a long term facility?

I would have otherwise assumed it was still a temporary situation.

Ron

On Apr 17, 2017, at 1:30 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

I have yet to see any numbers. I think we are still at the concept level. As you know, OPG will buy the asset from IESO on an ongoing basis. What has yet to be determined is frequency of these transactions, which could be anywhere from weeks to 3 months of delay. Therefore IESO needs a larger credit facility from OFA to meet this temporary shortfall.

In addition, there may be circumstances where OPG does not purchase the asset (either due to temporary market conditions or overall capacity issues). Therefore IESO needs the capacity to finance these shortfalls until the market recovers or Province decides on a different course of action. I see this as a contingent fund, which only needs to become available in the event one of these circumstances arise.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 10:52 AM
To: Nelms, Scott (MOF)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro

Hi Scott,

I am likely behind the curve on this.

I could see short term financing needs, especially early on perhaps, but long term financing from the OFA (vs OPG'S SPV)?

Why is that arising?

Thanks,
Ron

Begin forwarded message:

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Date: April 16, 2017 at 11:55:08 AM EDT
To: Kim Marshall <Kim.Marshall@ieso.ca>, Ronald Kwan <Ronald.Kwan@ofina.on.ca>, Michael Boll <Michael.Boll@ieso.ca>, Mike Manning <Mike.Manning@ofina.on.ca>, Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>, Victor Buza <Victor.Buza@ieso.ca>
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- in order to minimize costs and maximize cash-flow flexibility (matching to OPG SPV buys) – any appetite to amending the current 28 day minimum for draws;

2. IESO's Fair Hydro role

- IESO's credit rating agencies (Moody's Aa2, and DBRS) will examine IESO's credit capacities/solvency – need to update IESO/OFA's credit facilities to remove material adverse effect clauses or similar clauses and acknowledge/agree IESO's role in the Fair Hydro plan and commitment to advance funds under the credit facility if needed for the Fair Hydro cash-flows.

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From: [Nelms, Scott \(MOF\)](#)
To: [Ronald Kwan](#)
Subject: RE: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 1:30:32 PM

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From: [John Kim](#)
To: [Bruno Amara](#); [Ronald Kwan](#)
Subject: RE: OFA-IESO, discussion re Fair Hydro
Date: Sunday, April 16, 2017 3:12:03 PM

This being the 975M OFA facility....there might be a need to brief up regardless if the ongoing involvement requires IESO borrowing terms to deviate from the 28 to 95 day term limit mentioned in the Directive.

On the term side of things, the issues are mostly on CMD's operating constraints than policy-based ones.

I agree on the two concerns (recovery and accounting). Understood that there was an accounting reason for limiting the Province's involvement to 44% equity injection so even if for bridging purposes, wouldn't ongoing funding (both short term and long term) be an issue?

From: Bruno Amara
Sent: April-16-17 1:07 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>
Subject: RE: OFA-IESO, discussion re Fair Hydro

Hi

I'm not fully understanding which facilities are referred or what would be "Fair Hydro amounts not purchased by the OPG SPV (long term)" but for what its worth I believe the following was added to the IESO credit facility note .

"The IESO has a separate credit facility with the OFA which provides short-term financing for market-related transactions such as financing variance accounts and could potentially use that credit facility to finance the GA smoothing proposal on a short-term basis."

The IESO revolving credit facility with OEFC that was just extended noted generally that it was to be used for short term borrowing and working capital needs.

Bruno

From: Ronald Kwan
Sent: Sunday, April 16, 2017 12:04 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: FW: OFA-IESO, discussion re Fair Hydro

Hi,

Please review and comment.

If this is on-going, and potentially not just short-term, I'd be inclined to ask about certainty of recovery, accounting treatment, and I might think we'd need to brief up, as this is for a purpose not discussed at the time the facility was provided (even if the facility does not explicitly restrict its use).

Ron

From: Anthony Martinello [<mailto:Anthony.Martinello@ieso.ca>]
Sent: April-16-17 11:55 AM
To: Kim Marshall <Kim.Marshall@ieso.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; Victor Buza <Victor.Buza@ieso.ca>
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From: [Bruno Amara](#)
To: [Ronald Kwan](#); [John Kim](#)
Subject: RE: OFA-IESO, discussion re Fair Hydro
Date: Sunday, April 16, 2017 1:07:27 PM

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From: [Ronald Kwan](#)
To: ["Anthony Martinello"](#)
Subject: RE: OFA-IESO, discussion re Fair Hydro
Date: Tuesday, April 18, 2017 10:10:50 AM

Hi Anthony,

How much has the IESO accumulated in amounts for OESP for the period in respect of up to the end of March 31, 2017?

Thanks,
Ron

From: Anthony Martinello [mailto:Anthony.Martinello@ieso.ca]
Sent: April-16-17 11:55 AM
To: Kim Marshall <Kim.Marshall@ieso.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; Victor Buza <Victor.Buza@ieso.ca>
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recipient(s), please notify the sender immediately and delete this e-mail message.

From: [Ronald Kwan](#)
To: [Steen Hume \(CAB\)](#)
Subject: RE: OFHP
Date: Tuesday, May 09, 2017 8:56:16 AM

Hi Steen,

Please note in your deck in the part on the IESO request for a facility from the OFA that an Order-in-Council would be needed to facilitate this new OFA-IESO credit facility.

Thanks,
Ron

From: Ronald Kwan
Sent: May-05-17 3:08 PM
To: Steen Hume (CAB) <Steen.Hume@ontario.ca>
Subject: RE: OFHP

Hi Steen,

Just wanted to check in on the drafting of the submission and if we can review it, or drafts of portions related to the OFA / financing / fiscal to help the process as long. Appreciate that timelines are challenging, so we'd be happy to further input on the draft.

Ron

From: Ronald Kwan
Sent: May-02-17 12:16 PM
To: Steen Hume (CAB) <Steen.Hume@ontario.ca>
Cc: Scott Nelms (ENERGY) <Scott.Nelms@ontario.ca>; Hilary Cox (ENE) <Hilary.Cox@ontario.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: Re: OFHP

Hi Steen,

See attached. Happy to discuss. Would you be able to share a copy of the revised deck.

Thanks,
Ron

From: Hume, Steen (ENERGY) <Steen.Hume@ontario.ca>
Sent: May 2, 2017 9:37:12 AM
To: Ronald Kwan
Cc: Scott Nelms (ENERGY); Hilary Cox (ENE)
Subject: RE: OFHP

Thanks Ron. That would be helpful.

Steen

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: May-02-17 9:36 AM
To: Hume, Steen (ENERGY)
Cc: Nelms, Scott (MOF); Cox, Hilary (ENERGY)
Subject: Re: OFHP

Hi Steen,

I had been waiting for comments, but barring that, I can see about sending a draft later this morning.

Ron

On May 2, 2017, at 9:32 AM, Hume, Steen (ENERGY) <Steen.Hume@ontario.ca> wrote:

Good morning Ron. Last week before the Budget, we talked about OFA preparing some content for our TB submission, specifically around your discussion with IESO re enhanced line of credit.

Do you have anything to pass along?

Thanks, Steen

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From: [Ronald Kwan](#)
To: [Steen Hume \(CAB\)](#)
Subject: RE: OFHP
Date: Friday, May 05, 2017 3:08:14 PM

Hi Steen,

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From: [Ronald Kwan](#)
To: [Steen Hume \(CAB\)](#)
Cc: [Scott Nelms \(ENERGY\)](#); [Carolyn Calwell \(MCSS\)](#); [Hilary Cox \(ENE\)](#)
Subject: RE: OFHP
Date: Tuesday, May 09, 2017 9:34:56 AM

Hi Steen,

That's okay. In the absence of seeing the draft submission, staff noted the requirement to TBS staff, who did note the requirement in the TB assessment note. We'll have to deal with it later. It would be an LRC OIC.

The issue is that the current OIC (originally from 1997) that provides for the Minister of Finance to lend to the OFA for the OFA to provide credit facilities generally (not just to the IESO) is too small to provide the IESO the larger size of credit facility it is requesting.

Ron

From: Hume, Steen (ENERGY) [mailto:Steen.Hume@ontario.ca]
Sent: May-09-17 9:10 AM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Scott Nelms (ENERGY) <Scott.Nelms@ontario.ca>; Carolyn Calwell (MCSS) <Carolyn.Calwell@ontario.ca>; Hilary Cox (ENE) <Hilary.Cox@ontario.ca>
Subject: RE: OFHP

Hi Ron. Really? This is the first time this issue has been explicitly raised. Gadi didn't flag it last week in our weekly meeting on OFHP implementation, he just indicated to IESO that OFA would provide the new credit facility. Had we know in advance, might have been able to address it at TB today or LRC/Cabinet tomorrow.

Anyway, please send over the OIC from the previous OFA-IESO credit facility. Is this something OFA/ MOF leads or does ENERGY lead this work? Timing is a consideration on this.

Also, is it an OIC that is TB approved or LRC approved?

Thanks, Steen

From: Ronald Kwan [mailto:Ronald.Kwan@ofina.on.ca]
Sent: May-09-17 8:56 AM
To: Hume, Steen (ENERGY)
Subject: RE: OFHP

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Thanks,
Ron

From: [John Kim](#)
To: [Ronald Kwan](#)
Cc: [Bruno Amara](#); [Salman Qadir](#)
Subject: RE: Requirements for OFA to lend to IESO
Date: Friday, May 05, 2017 2:45:48 PM

No, TBS has not received a submission. They are anticipating it over the weekend.

If you recall, I don't believe the OFA was part of the draft legislation deck.

John

From: Ronald Kwan
Sent: Friday, May 05, 2017 2:40 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: RE: Requirements for OFA to lend to IESO

Hi John

I had already discussed with Steen that the IESO request for an OFA facility be included in the submission, and I sent to him the two slides that we had drafted. I had also discussed with him the concept of noting that the OFA would provide IESO a facility. At the time, the requirement for an OIC had not been discussed.

Has TBS seen a draft submission from Energy yet?

In any case, we should update our slides on this.

I note too that the diagram that EIGS put in its placemat is updated from the one in the March submission that we added the OFA and IESO request for a facility to. That new chart did have OFA on it with a facility to the IESO. I don't know if that is an indication that will be in the diagram in Energy's sub. You could ask Kaitlin about that.

Ron

From: John Kim
Sent: May-05-17 2:25 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: RE: Requirements for OFA to lend to IESO

Hi Ron,

We just had a call with TBS staff to discuss the potential OIC requirement. They pulled in staff from OPCD and we also mentioned that the amount of time for the borrowing could be more than under

the current RPP variance account timeline and that the request for the loan appears to be to facilitate timelines greater than the short-term timing differences. That could there be any accounting/fiscal considerations arising from such a scenario was our subtle question to them.

All this was essentially to seek TBS' guidance on how to proceed and try to get Energy add this to their submission. Their advice was that Energy should indeed include this in their submission either in the Minute or in the other parts of the submission (TBC). Along this line, a communication will need to be made to Energy at a senior level. Not sure if this would be to Michael, Steen, etc? Not sure what the protocol would be.

My understanding from the H1 scenario was that they explicitly requested an OIC be put in place. That said, I'm not sure if that was OFA's lending or the Province's lending.

John

From: Ronald Kwan
Sent: Thursday, May 04, 2017 5:12 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: Re: Requirements for OFA to lend to IESO

Thanks Bruno.

Ron

On May 4, 2017, at 5:06 PM, Bruno Amara <Bruno.Amara@ofina.on.ca> wrote:

Hi Ron

Patrick Rundans is the MoF Legal contact on this question since he is involved usually with OFA Documentation for OICs. Toby Whitfield is the contact on OFHP. We understand that Patrick will connect with Toby but we will follow-up. We will also follow-up with TBS/Energy on having this issue raised in Energy's submissions, through a minute note or otherwise.

Thanks
Bruno

From: Ronald Kwan
Sent: Thursday, May 04, 2017 4:48 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>

Subject: Re: Requirements for OFA to lend to IESO

Thanks Bruno.

Which MOF Legal counsel is on this file? Are they involved in the Fair Hydro Plan discussions as well?

If OFA needs an OIC on this, would we consider having Energy add that to its submissions, at least as an FYI, and a "Note" in the Minute to say that MOF would be seeking an OIC to be able to respond to IESO's request? As IESO is an agency of Energy, and the FHP is an Energy initiative, I think it would be good to have this facility for IESO and required OIC acknowledged.

Ron

From: Bruno Amara
Sent: May 4, 2017 3:15:21 PM
To: Ronald Kwan
Cc: John Kim; Salman Qadir
Subject: FW: Requirements for OFA to lend to IESO

Hi Ron

Attached is a draft note on process for approval for OFA to lend to the IESO.

Thanks
Bruno

From: [Ronald Kwan](#)
To: [John Kim](#)
Cc: [Bruno Amara](#); [Salman Qadir](#)
Subject: RE: Requirements for OFA to lend to IESO
Date: Friday, May 05, 2017 2:39:36 PM

Hi John

I had already discussed with Steen that the IESO request for an OFA facility be included in the submission, and I sent to him the two slides that we had drafted. I had also discussed with him the concept of noting that the OFA would provide IESO a facility. At the time, the requirement for an OIC had not been discussed.

Has TBS seen a draft submission from Energy yet?

In any case, we should update our slides on this.

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Ron

From: John Kim
Sent: May-05-17 2:25 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: RE: Requirements for OFA to lend to IESO

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My understanding from the H1 scenario was that they explicitly requested an OIC be put in place. That said, I'm not sure if that was OFA's lending or the Province's lending.

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From: Ronald Kwan
Sent: Thursday, May 04, 2017 5:12 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: Re: Requirements for OFA to lend to IESO

Thanks Bruno.

Ron

On May 4, 2017, at 5:06 PM, Bruno Amara <Bruno.Amara@ofina.on.ca> wrote:

Hi Ron

Patrick Rundans is the MoF Legal contact on this question since he is involved usually with OFA Documentation for OICs. Toby Whitfield is the contact on OFHP. We understand that Patrick will connect with Toby but we will follow-up. We will also follow-up with TBS/Energy on having this issue raised in Energy's submissions, through a minute note or otherwise.

Thanks
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From: Ronald Kwan
Sent: Thursday, May 04, 2017 4:48 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
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Which MOF Legal counsel is on this file? Are they involved in the Fair Hydro Plan discussions as well?

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facility for IESO and required OIC acknowledged.

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From: Bruno Amara

Sent: May 4, 2017 3:15:21 PM

To: Ronald Kwan

Cc: John Kim; Salman Qadir

Subject: FW: Requirements for OFA to lend to IESO

Hi Ron

Attached is a draft note on process for approval for OFA to lend to the IESO.

Thanks

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To: [Ronald Kwan](#)
Cc: [Bruno Amara](#); [Salman Qadir](#)
Subject: RE: Requirements for OFA to lend to IESO
Date: Friday, May 05, 2017 2:25:24 PM

Hi Ron,

We just had a call with TBS staff to discuss the potential OIC requirement. They pulled in staff from OPCD and we also mentioned that the amount of time for the borrowing could be more than under the current RPP variance account timeline and that the request for the loan appears to be to facilitate timelines greater than the short-term timing differences. That could there be any accounting/fiscal considerations arising from such a scenario was our subtle question to them.

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From: [Bruno Amara](#)
To: [Ronald Kwan](#)
Cc: [John Kim](#); [Salman Qadir](#)
Subject: RE: Requirements for OFA to lend to IESO
Date: Thursday, May 04, 2017 5:06:31 PM

Hi Ron

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To: [John Kim](#)
Cc: [Bruno Amara](#); [Salman Qadir](#)
Subject: RE: Requirements for OFA to lend to IESO
Date: Friday, May 05, 2017 2:50:01 PM

Hi John,

That is true, but OFA's role would not need legislation. We should monitor.

And if you could revise the slides to indicate the need for an OIC, and get from Legal / TBS suggested Minute wording, I can send that to Steen.

Thanks,
Ron

From: John Kim
Sent: May-05-17 2:46 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: RE: Requirements for OFA to lend to IESO

No, TBS has not received a submission. They are anticipating it over the weekend.

If you recall, I don't believe the OFA was part of the draft legislation deck.

John

From: Ronald Kwan
Sent: Friday, May 05, 2017 2:40 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
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Bruno

From: Ronald Kwan
To: [Tomasz Bugajski](#)
Subject: RE: bi-weekly
Date: Wednesday, November 16, 2016 3:54:00 AM
Attachments: [MO Bi-Weekly November 16_v2.docx](#)

Hi,

See attached.

Ron

From: Tomasz Bugajski
Sent: November-15-16 4:19 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: RE: bi-weekly

Hi Ron – CFB submitted its content. Here's an updated agenda.

Tomasz Bugajski
EA & Special Policy Advisor
Corporate and Electricity Finance Division
Ontario Financing Authority
416-325-0924 | tomasz.bugajski@ofina.on.ca

From: Tomasz Bugajski
Sent: Tuesday, November 15, 2016 3:40 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: RE: bi-weekly

Hi Ron – here's the annotated agenda as it stand now. Still waiting on CFB.

Tomasz Bugajski
EA & Special Policy Advisor
Corporate and Electricity Finance Division
Ontario Financing Authority
416-325-0924 | tomasz.bugajski@ofina.on.ca

From: Ronald Kwan
Sent: Tuesday, November 15, 2016 11:50 AM
To: Tomasz Bugajski <Tomasz.Bugajski@ofina.on.ca>
Subject: Re: bi-weekly

Hi,

That's okay.

We need to pull together an annotated agenda.

Ron

On Nov 15, 2016, at 11:48 AM, Tomasz Bugajski <Tomasz.Bugajski@ofina.on.ca> wrote:

Hi Ron – Marianne would like to do the bi-weekly at 9:30 tomorrow morning, assuming the DM pre-brief is moved, would that time work for you? Not sure if you plan to attend the APPrO conference though...

Tomasz Bugajski

EA & Special Policy Advisor

Corporate and Electricity Finance Division

Ontario Financing Authority

416-325-0924 | tomasz.bugajski@ofina.on.ca

ANNOTATED AGENDA

MO Bi-Weekly: November 16, 2016

1. Trillium Trust Disbursements

- CEFD staff have been working with other areas of Ministry of Finance, TBS, and other relevant Ministries on a Treasury Board submission that would support drawing down on the balance of the Trillium Trust in 2016-17 and future years.
- TBS staff have advised that it would be very challenging for the submission to move forward for the November 29th Treasury Board meeting, given that a framework on how to implement Trillium Trust drawdowns has not yet been finalized. TBS staff have instead proposed targeting the December 6th Treasury Board meeting, which should still support having a framework and approvals in place in advance of finalizing the government's PRRT process

2. Kingston Cogen Request for Power Purchase Agreement Extension

- In June 2015, Northland Power requested discussions on an extension to the Power Purchase Agreement (PPA) for Kingston Cogen, which currently expires on January 31, 2017.
 - The Kingston PPA provides that Kingston Cogen may be renewed on request of the Generator for a further term of five years minimum, subject to rates, terms and conditions to be negotiated.
- On November 16, 2015, OEFC offered a five year extension of the Kingston PPA at an average rate of approximately \$30/MWh, escalated at Ontario CPI.
 - OEFC's offer was based on the projected market value of the power from the facility over the renewal period as provided by IESO at that time.
- On January 11, 2016, Northland stated that it was prepared to consider a rate of \$23/MWh (in 2017 dollars) escalated at CPI plus flow through of gas and gas transportation costs for a five-year term. Northland stated that, as an example, using its then projected costs for gas and gas transportation in 2017, the effective rate would be approximately \$59/MWh.
- OEFC relies on the Independent Electricity System Operator ("IESO") to provide valuations of generation and capacity to the Ontario electricity system. On June 24, 2016, OEFC informed Northland Power that, based on an updated IESO assessment of little or no projected value of Kingston CoGen to the electricity system, it could not revise upwards its November 16, 2015 offer.

- Staff for OEFC facilitated discussions between Northland and IESO in an attempt to explore avenues for re-contracting. It is outside of OEFC's mandate to make a determination on the need for or terms at which to contract for or procure additional electricity supply.
 - It is the mandate of the IESO to determine long-term system needs and how to meet those needs, including the option to contract for long-term generation.
 - IESO has not expressed an interest in pursuing proposals from Northland for re-contracting Kingston.
- On November 2, 2016, Northland sent a letter to OEFC requesting further discussions on an extension of the Kingston PPA. OEFC's response will reiterate that it cannot in its commercial interest and meeting its mandate, offer or agree to rates in excess of the market value of the power that would be delivered. The response will also state that staff for OEFC will be available for further discussions Northland may wish to pursue on this matter.

3. IESO \$975M Line of Credit Extension

- The Independent Electricity System Operator (IESO) has requested a three-year extension to December 31, 2019, of the \$975 million revolving credit facility provided by the Province through the Ontario Financing Authority (OFA).
 - o To accommodate this request, the OFA requires a new Lending Directive from the Minister of Finance in the near term.
 - o The Minister's directive is required before OFA can proceed to finalize and enter into an amending credit agreement – all prior to the December 31, 2016 expiration date of the current agreement.
- Maintaining the \$975 million credit limit will allow the IESO to provide liquidity into the electricity market to support various initiatives including the Regulated Price Plan (RPP), the Rural or Remote Electricity Rate Protection (RRRP), the new Ontario Electricity Support Program (OESP), the various conservation programs and overall market liquidity.
- The existing credit facility agreement, which expires on December 31, 2016, was last amended in December 2014 following the amalgamation of the Ontario Power Authority (OPA) and the IESO where the new "IESO" assumed all rights and obligations under the existing OFA-OPA \$975 million credit agreement.

4. Debt Retirement Charge (DRC) Regulation Update:

- Ministry of Energy has proposed amendments to the 2005 Net Metering Regulation (O. Reg. 541/05) in the Ontario Energy Board Act, 1998, which includes removing the 500

kilowatts (kW) maximum output capacity restriction to expand the eligibility to larger customers.

- o Based on the most recent information, Energy is tracking to LRC on November 28.
- CEFD and TPD staff were informed during a call with Energy counterparts that this proposal will/may also require some changes to O. Reg. 493/01 under the Electricity Act, 1998 specifically related to the DRC. Energy is suggesting to remove the 500 kilowatts (kW) maximum output capacity restriction under the “net metered generation facility” definition to make both regulations consistent.
- This change may create a fiscal impact since it could reduce DRC revenues. However, according to the impact analysis provided by Energy, the fiscal impact is very little to no impact, given the proposed change will not be implemented until July 1, 2017, and DRC is ending on April 1, 2018 (9 months overlap).
- The suggested change may require a regulatory registry process, CEFD staff are verifying this with MOF Legal to establish for next steps. In addition, staff are working with Energy to get further clarification on the requirements and alternatives.

5. “Green Bank”

- MOECC is planning to seek TB approval on November 29th of the establishment of and the accountability framework for the new climate change agency (name TBD).
- Staff provided input to MoF/TBS team coordinating comments on MOECC’s draft TB submission. A copy of the draft reg has not been circulated yet. A new submission and draft regulation are supposed to be circulated this Friday and are on the Dec 6 TB meeting.
- Major concern is lack of specifics re proposed financing programs and what the draft Regulation will contain, given that the draft Regulation is expected to be filed with the TB submission, but most agency programs - especially the financing programs - are still in the very early development stage.

6. FAA Section 28 Sharing Protocol

- TBS comments on the sharing protocol has been incorporated. Protocol is undergoing a final staff level review before being circulated to DM/MO and briefings set up.
- An OFA/MoF/TBS working group has been established to review options for modernizing s.28 of the FAA.

BACKPOCKET

7. MaRS proposed \$290M takeout financing, with associated MRIS \$84M loan

- MRIS is proposing to seek TB approval on November 29th.
- Staff provided comments on the TB submission to MRIS and TBS. OFA informed TB staff that while they have some concerns, they are not opposing the proposed transactions. Staff recommended that two options, with considerations, be presented, (i) approve, and (ii) don't approve (stay with current financing and explore takeout financing again in 2019 before the expiry of the current arrangements).
- Key concerns:
 - The new MRIS loan would not be one term loan (like the proposed Manulife takeout loan) but rather two loans: one \$32M term loan with a fixed interest rate and one \$52M floating rate facility based on a "cash flow sweep" approach with the Province at the bottom of the cash flow priority for payment of these loans.
 - Interest rate to be provided to the Province is lower, while in a riskier position in terms of priority of payment and holding lower-ranking security.
 - The security that the Province does retain re the tower would not be enforceable until 2035.
 - Interest costs to MaRS of refinancing now versus at the end of December 2019 would be higher (\$30 million or \$10 million annually).

From: [Ronald Kwan](#)
To: [John Kim](#)
Subject: Re: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Date: Tuesday, May 02, 2017 2:43:16 PM

Hi John,

Do you have the final markup version we sent on the CBN? And a revised version?

Also, did we get it through TBS?

I'd like to keep the DMO in the loop on this.

Thanks,
Ron

From: John Kim
Sent: May 2, 2017 2:41:09 PM
To: Ronald Kwan
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

[Fyi, pls. note the CO inquiry.](#)

From: John Kim
Sent: Tuesday, May 02, 2017 2:38 PM
To: James Strang (MOF) <James.Strang@ontario.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

[While I don't see why we wouldn't facilitate the request, we would require Minister's authorization of some sort and staff level, we view that TB/MBC should be made aware of the request/requirement.](#)

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Tuesday, May 02, 2017 2:34 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

[CO has a question below. Is this an OFA decision, or is a TB/MBC decision needed?](#)

From: Hindmarch-Watson, Tim (CAB)
Sent: May 2, 2017 1:58 PM
To: Strang, James (TBS)
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Thanks James.

At a few points in the OFA comments they say "The IESO has requested a backstop credit facility from the OFA." Do you know if the plan is to grant this request?

Thanks!

Tim Hindmarch-Watson
416-325-4618

From: Strang, James (TBS)
Sent: May-02-17 12:43 PM
To: Hindmarch-Watson, Tim (CAB)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Tim, just got some feedback from Ontario Financing Authority.

James

From: John Kim [<mailto:John.Kim@ofina.on.ca>]
Sent: May 2, 2017 12:39 PM
To: Strang, James (TBS)
Cc: Bruno Amara
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi James,

I sense we missed the boat and there's new information but see attached comments/edits.

John

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Monday, May 01, 2017 8:51 AM
To: Didem Proulx (MTCU) <Didem.Proulx@ontario.ca>; Helen Graham (MOF) <Helen.Graham@ontario.ca>; Paul Kaufman (MOHLTC) <Paul.Kaufman@ontario.ca>; Nick Smook (MOF) <Nick.Smook@ontario.ca>; John Kim <John.Kim@ofina.on.ca>
Cc: Felix Fung (MOF) <Felix.Fung@ontario.ca>; Chris Skubel (MGS) <Chris.Skubel@ontario.ca>; Nina Arbabzadeh (EDU) <Nina.Arbabzadeh@ontario.ca>; Patrick Laughton (MOF) <Patrick.Laughton@ontario.ca>; Hosick, Sarah (TBS) <Sarah.Hosick@ontario.ca>; Sandy Luk (MOHLTC) <Sandy.Luk@ontario.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Draft note from Cabinet Office. They're looking for feedback by EOD today (May 1).

I'm happy to coordinate any responses.

James

From: Hindmarch-Watson, Tim (CAB)
Sent: April 28, 2017 3:46 PM
To: Fung, Felix (TBS); Skubel, Chris (TBS)
Cc: Strang, James (TBS); Moore, Karen (CAB)
Subject: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Hi Felix and Chris:

As mentioned earlier in the week, please find attached the draft CBN re the rate mitigation legislation for the TBS' review (password same as previous materials). This has been prepared with no materials and should be reviewed closely. I have left comments in the margin where I am looking for specific review or confirmation of particular details. I am interested in ensuring alignment in how we are characterizing the proposal and its risks.

The note is a bit on the longer side at the moment, so suggestions to economize without losing key pieces would also be helpful.

The note is undergoing concurrent review with Energy and my management now. My ADM will likely pass this along to Cindy and Karen for concurrent review given the time crunch, but please feel to pass along as well.

Please try to have any comments to me by EOD on Monday so I can get it to my DM and the Secretary on Tuesday.

Have a great weekend,

Tim Hindmarch-Watson

Policy Advisor
Justice, Resource and Environmental Policy
Policy and Delivery Division
Cabinet Office
416-325-4618

This message, including any attachments, is meant only for the use of the individual(s) to whom it is intended and may contain information that is privileged/confidential. Any unauthorized use, copying or disclosure is strictly prohibited. If you are not the intended recipient or have received this message in error, please notify us immediately by reply e-mail and permanently delete this message, including any attachments, without reading them, and destroy all copies. Thank you.

From: [Ronald Kwan](#)
To: [John Kim](#)
Subject: Re: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Date: Tuesday, May 02, 2017 3:08:22 PM

Hi John,

I think it might be nice to have in the Minute something like "Note that the IESO has requested a credit facility from the OFA to manage liquidity issues between the time IESO requires financing for monthly settlements to meet the requirements of the FHP, and the time when OPG's SPV purchases the IESO regulatory asset, or as a backstop in the case of the regulatory asset not being purchased for a period of time. Note that the Minister of Finance will provide a directive to the OFA to provide a new or expanded credit facility for this purpose."

Very open to better wording, or jargon tied to the draft legislation terminology.

Ron

From: John Kim
Sent: May 2, 2017 2:46:54 PM
To: Ronald Kwan
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Yes, we did.

We don't have a revised version yet but James shared the same FPC deck we have checking in.

Pls. see attached.

John

From: Ronald Kwan
Sent: Tuesday, May 02, 2017 2:43 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: Re: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi John,

Do you have the final markup version we sent on the CBN? And a revised version?

Also, did we get it through TBS?

I'd like to keep the DMO in the loop on this.

Thanks,

Ron

From: John Kim
Sent: May 2, 2017 2:41:09 PM
To: Ronald Kwan
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Fyi, pls. note the CO inquiry.

From: John Kim
Sent: Tuesday, May 02, 2017 2:38 PM
To: James Strang (MOF) <James.Strang@ontario.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

While I don't see why we wouldn't facilitate the request, we would require Minister's authorization of some sort and staff level, we view that TB/MBC should be made aware of the request/requirement.

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Tuesday, May 02, 2017 2:34 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

CO has a question below. Is this an OFA decision, or is a TB/MBC decision needed?

From: Hindmarch-Watson, Tim (CAB)
Sent: May 2, 2017 1:58 PM
To: Strang, James (TBS)
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Thanks James.

At a few points in the OFA comments they say "The IESO has requested a backstop credit facility from the OFA." Do you know if the plan is to grant this request?

Thanks!

Tim Hindmarch-Watson
416-325-4618

From: Strang, James (TBS)
Sent: May-02-17 12:43 PM
To: Hindmarch-Watson, Tim (CAB)
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Tim, just got some feedback from Ontario Financing Authority.

James

From: John Kim [<mailto:John.Kim@ofina.on.ca>]
Sent: May 2, 2017 12:39 PM
To: Strang, James (TBS)
Cc: Bruno Amara
Subject: RE: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st

Hi James,

I sense we missed the boat and there's new information but see attached comments/edits.

John

From: Strang, James (TBS) [<mailto:James.Strang@ontario.ca>]
Sent: Monday, May 01, 2017 8:51 AM
To: Didem Proulx (MTCU) <Didem.Proulx@ontario.ca>; Helen Graham (MOF) <Helen.Graham@ontario.ca>; Paul Kaufman (MOHLTC) <Paul.Kaufman@ontario.ca>; Nick Smook (MOF) <Nick.Smook@ontario.ca>; John Kim <John.Kim@ofina.on.ca>
Cc: Felix Fung (MOF) <Felix.Fung@ontario.ca>; Chris Skubel (MGS) <Chris.Skubel@ontario.ca>; Nina Arbabzadeh (EDU) <Nina.Arbabzadeh@ontario.ca>; Patrick Laughton (MOF) <Patrick.Laughton@ontario.ca>; Hosick, Sarah (TBS) <Sarah.Hosick@ontario.ca>; Sandy Luk (MOHLTC) <Sandy.Luk@ontario.ca>
Subject: FW: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Draft note from Cabinet Office. They're looking for feedback by EOD today (May 1).

I'm happy to coordinate any responses.

James

From: Hindmarch-Watson, Tim (CAB)
Sent: April 28, 2017 3:46 PM
To: Fung, Felix (TBS); Skubel, Chris (TBS)
Cc: Strang, James (TBS); Moore, Karen (CAB)
Subject: DRAFT CBN For Review- Rate Mitigation- Due EOD May 1st
Importance: High

Hi Felix and Chris:

As mentioned earlier in the week, please find attached the draft CBN re the rate mitigation legislation for the TBS' review (password same as previous materials). This has been prepared with no materials and should be reviewed closely. I have left comments in the margin where I am looking for specific review or confirmation of particular details. I am interested in ensuring alignment in how we are characterizing the proposal and its risks.

The note is a bit on the longer side at the moment, so suggestions to economize without losing key pieces would also be helpful.

The note is undergoing concurrent review with Energy and my management now. My ADM will likely pass this along to Cindy and Karen for concurrent review given the time crunch, but please feel to pass along as well.

Please try to have any comments to me by EOD on Monday so I can get it to my DM and the Secretary on Tuesday.

Have a great weekend,

Tim Hindmarch-Watson

Policy Advisor

Justice, Resource and Environmental Policy

Policy and Delivery Division

Cabinet Office

416-325-4618

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From: [Ronald Kwan](#)
To: [John Kim](#); [Bruno Amara](#)
Cc: [Deena Padamadan](#); [Salman Qadir](#); [Gavin He](#)
Subject: Re: GA - IESO Role and Financing v4 - extract v6.pptx
Date: Tuesday, May 02, 2017 12:10:31 PM
Attachments: [GA - IESO Role and Financing v4 - extract v11.pptx](#)

Hi,

I beefed up the fiscal risk bullet.

Ron

From: Ronald Kwan
Sent: May 1, 2017 6:45 PM
To: Bruno Amara
Cc: Deena Padamadan; Salman Qadir; Gavin He; John Kim
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Thanks Bruno. I saved a clean copy.

Ron

From: Bruno Amara
Sent: May-01-17 18:40
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Deena Padamadan <Deena.Padamadan@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>
Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Ron

Looked good to me. I had a couple of minor wording suggestions slide 1 and 2.

Bruno

From: Ronald Kwan
Sent: Monday, May 01, 2017 6:21 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Deena Padamadan <Deena.Padamadan@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi John,

How about this?

Ron

From: John Kim
Sent: May-01-17 17:42
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>; Deena Padamadan <Deena.Padamadan@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron,

Some edits. As discussed, I am not sure if we can say definitively what OPG Trust is expected to do.

John

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To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Thanks Bruno.

I changed it to Energy's PW.

Ron

From: Bruno Amara
Sent: April-28-17 15:14
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Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron

We're fine with additional edits. See attached.

Thanks
Bruno

From: Ronald Kwan
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Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi,

I made a few more edits.

Ron

From: Ronald Kwan
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Cc: Gavin He <Gavin.He@ofina.on.ca>; John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Bruno,

I had been thinking, to make it easier for Energy, to simply work with their version of the flow chart from the March CabSub.

That said, their version may have been updated since then anyways, but they could take out suggestions in.

I also added reworked some parts of the text slide, and dropped some detail, as it was rather dense – may still be!

Thanks,
Ron

From: Bruno Amara
Sent: April-28-17 11:28
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron

Attached are the updated slides per you request.

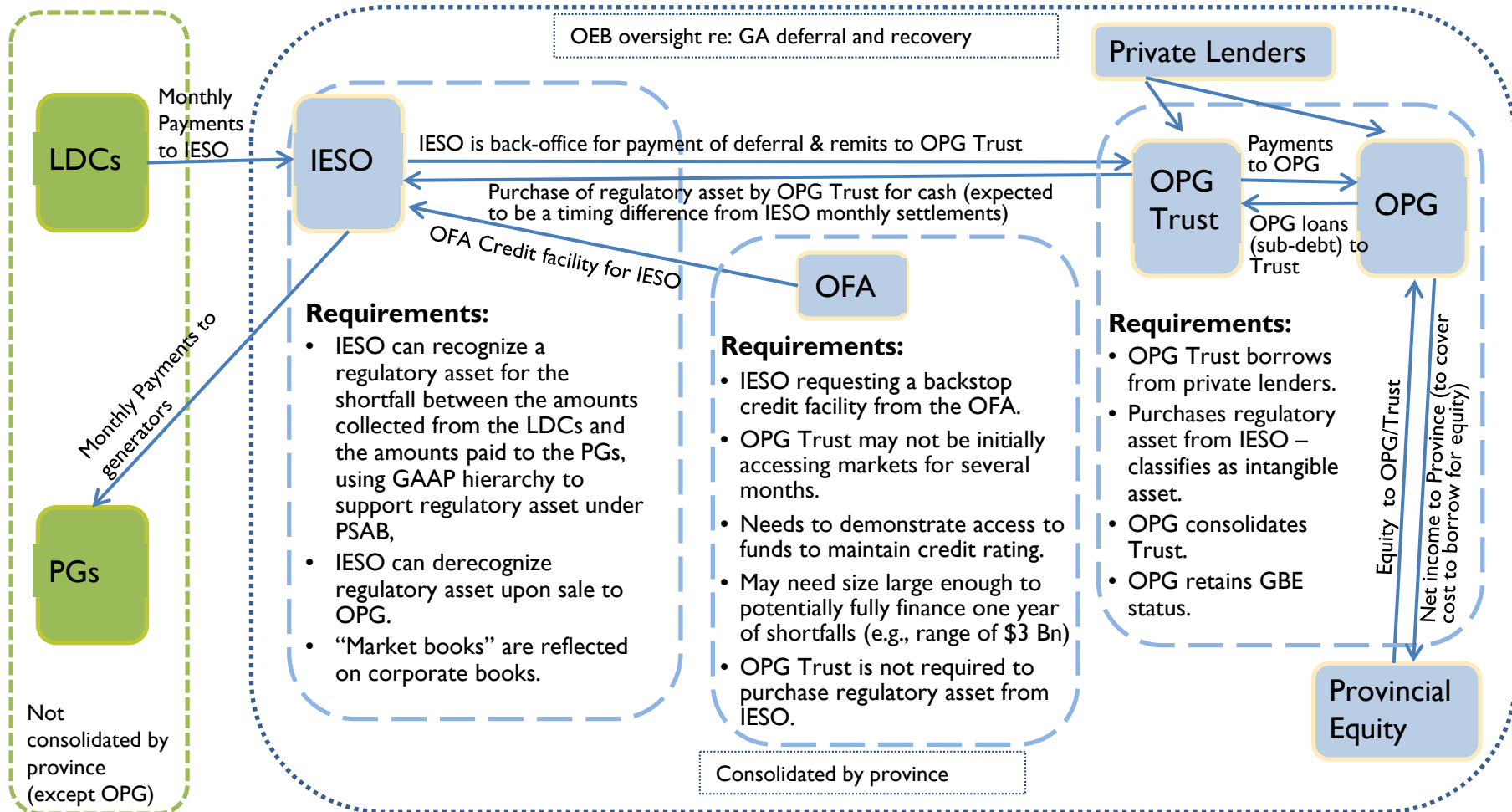
Thanks
Bruno

GA Financing Plan: Role of IESO

Corporate and Electricity Finance Division
May 1, 2017

GA Smoothing – Proposed Structure

- The following diagram provides an overview of the proposed GA smoothing structure, as well as interactions between sector entities and elements required to meet accounting objectives.



► **Note:** Proposed structure is subject to legal and accounting confirmation, absent that confirmation, there would be a fiscal impact to the province.

IESO Financing Requirements

- IESO will need to ensure that it continues to have the funds available to provide payments to generators on a monthly basis as part of the IESO settlements process, while recoveries from LDCs for Regulated Price Plan (RPP) / Fair Hydro Plan eligible customers will be lower.
- IESO has an existing credit facility from the OFA; however, a new or expanded facility is being requested.
- IESO would require financing to compensate generators should it be required to hold any portion of the unpurchased Regulatory Asset beyond each monthly settlement period.
 - OPG Trust is not expected to access public capital markets for several months after the start of the FHP, and may be purchasing the asset with a lag vs monthly settlements. Also, OPG Trust is not required to purchase the regulatory asset.
 - IESO will need a credit facility for interim financing.
 - IESO may require longer-term financing to maintain the deferral financing plan, should the OPG Trust not be able to access debt markets on a timely basis for purchase of some or all of the regulatory asset.
- Based on Ministry of Energy's GA deferral plan, it is estimated that approximately \$2.5-3.0 billion need to be deferred per year for over first 10 years, equal to approximately \$200-250 million per month, on average.¹
 - The size of the credit facility required to backstop IESO could be \$2.5 to \$3.0 billion. [TBC]
- There is a fiscal impact and accounting risk on OFA financing of the IESO requirements if it were to be more than temporary borrowing to cover timing differences on when the OPG SPV buys the regulatory asset vs the timing of IESO monthly settlements.
 - Even if IESO is allowed to recognize the Regulatory Asset, on consolidation into Public Accounts, the regulatory asset would not be expected to be recognised, so that the deferral amount and associated financing costs would be expected to have a fiscal impact..
- The monthly and annual amount being deferred and the resulting monthly amounts can be substantially different than forecast based on various factors, such as seasonality or electricity usage, as well as potential changes to electricity costs from OEB rate decisions, with IESO estimating deferral amounts as high as \$400 million per month.
- Other factors that may increase IESO's financing requirements:
 - IESO will also incur financing charges that will need to be refinanced.
 - The financing and administration costs that OPG Trust incurs will need to be paid.

¹ Based on Ministry of Energy's annual GA deferral amounts, assuming the monthly deferral is equally-weighted.

From: [Ronald Kwan](#)
To: [John Kim](#)
Cc: [Deena Padamadan](#); [Salman Qadir](#); [Gavin He](#); [Bruno Amara](#)
Subject: Re: GA - IESO Role and Financing v4 - extract v6.pptx
Date: Tuesday, May 02, 2017 1:59:37 PM

Thanks John. Gadi wanted to be more direct -- though "risk" is still in the sentence. Energy may want to tweak too.

Ron

From: John Kim
Sent: May 2, 2017 12:34:09 PM
To: Ronald Kwan
Cc: Deena Padamadan; Salman Qadir; Gavin He; Bruno Amara
Subject: RE: GA - IESO Role and Financing v4 - extract v6.pptx

Minor edits. Looks good.

John

From: Ronald Kwan
Sent: Tuesday, May 02, 2017 12:11 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: Deena Padamadan <Deena.Padamadan@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>; Gavin He <Gavin.He@ofina.on.ca>
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Thanks
Bruno

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Subject: FW: GA - IESO Role and Financing v4 - extract v6.pptx

Hi Ron

Attached are the updated slides per you request.

Thanks
Bruno

From: [Ronald Kwan](#)
To: [John Kim](#)
Cc: [Bruno Amara](#); [Salman Qadir](#)
Subject: Re: IESO credit facility
Date: Friday, May 05, 2017 4:39:56 PM

Hi,

I'd say the OFA, as it's a revolving facility, by intent, vs a multi-year loan to external entities -- the union trusts, if that's what you mean by a "Hydro One" loan.

It makes more sense to me that the OFA provide the type of facility that the IESO is asking for, and as a public body (the old OPA was one, and is the IESO one for this purpose?)

Are there other considerations?

Ron

On May 5, 2017, at 4:14 PM, John Kim <John.Kim@ofina.on.ca> wrote:

Hi Ron,

Along this item, we have a question. We have been running under the assumption that the OFA would be providing the facility much like the 975M facility. Is that the fair assumption or should be contemplate the scenario of the Province lending to the IESO. I understand the H1 loan was done under the latter scenario.

Just throwing it out there so that we are not being presumptuous.

Thanks,

John

From: Bruno Amara
Sent: Friday, May 05, 2017 4:10 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: IESO credit facility

Hi Ron

We added a note about the need for an OIC in the attached deck. Also below is some draft wording for a Note to be included in Energy's submission. I have sent it to TBS asking for comment and noting that it is placeholder that can be finalized early next week. I have not yet heard back from TBS.

Note, that in order to ensure that the IESO has the flexibility to cover clean energy costs, if for some reason the Trust, at any time, does not purchase any portion of the deferred Global Adjustment amounts payments, a new credit facility is being requested by the IESO. An order-in-council will be sought to allow the OFA to be able to provide the new credit facility to the IESO, for an amount to be determined as per the requirements of the Fair Hydro Plan.

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

From: [Ronald Kwan](#)
To: [Gadi Mayman](#)
Cc: [Mike Manning](#); [Anna Strathy](#); [Gavin He](#)
Subject: Re: OFA : IESO
Date: Thursday, April 13, 2017 8:37:55 AM

Hi Gadi,

Will do.

Ron

On Apr 13, 2017, at 8:00 AM, Gadi Mayman <Gadi.Mayman@ofina.on.ca> wrote:

Hi Mike and Ron, could one of you please get back to Anthony and handle this?

Thanks,
Gadi

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Sent: Thursday, April 13, 2017 7:41 AM
To: Gadi Mayman
Cc: Kim Marshall; Michael Boll
Subject: OFA : IESO

Mr. Mayman,

Kim and I would like to set up a 30min call with you to discuss the proposed Fair Hydro rollout and the potential impact on the IESO credit needs.

Would you be available next week/preferred date? Let me know and I will send out a meeting invite.

Regards

This e-mail message and any files transmitted with it are intended only for the named recipient(s) above and may contain information that is privileged, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient(s), any dissemination, distribution or copying of this e-mail message or any files transmitted with it is strictly prohibited. If you have received this message in error, or are not the named recipient(s), please notify the sender immediately and delete this e-mail message.

From: [Ronald Kwan](#)
To: [John Kim](#)
Subject: Re: OFA-IESO loan
Date: Saturday, January 21, 2017 12:14:13 PM

Thanks John.

Ron

On Jan 21, 2017, at 5:08 AM, John Kim <John.Kim@ofina.on.ca> wrote:

Hi Ron,

For sure, I briefly looked at the IESO financials after coming back from the meeting yesterday. They only have the 90M on their books.

We are conducting due diligence on IESO's credit facility request as we speak so we will have a very close look at the market book, etc. While not the OFA facility, we will use it as an opportunity to delve deeply into the accounting considerations, etc.

Thanks,

John.

From: Ronald Kwan
Sent: Friday, January 20, 2017 5:39 PM
To: John Kim <John.Kim@ofina.on.ca>
Subject: FW: OFA-IESO loan

Hi John,

Take note.

Thanks,
Ron

From: Petsche, Nadine (TBS) [<mailto:Nadine.Petsche@ontario.ca>]
Sent: January-20-17 17:37
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Bharat Patel (MOF) <Bharat.Patel3@ontario.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; John Psinas <John.Psinas@ofina.on.ca>
Subject: FW: OFA-IESO loan

Ronald,
Since you were on today's call, I thought it might be helpful to loop you in on this

request as well. N

From: Patel, Bharat (TBS)
Sent: January-20-17 5:13 PM
To: Kandeepan, Ken (OFA); John Psinas
Cc: Petsche, Nadine (TBS); Veinot, Cindy (TBS)
Subject: FW: OFA-IESO loan

Ken/John,

Not sure if you are the right person to ask, but can you please help to get the answer for \$100M RRP program support that OFA provides to IESO? We are interested in how this loan is recorded (i.e. on the books vs. market)? if on the books where? And if market how it works?

Thanks,
Bharat

From: Veinot, Cindy (TBS)
Sent: January-20-17 5:05 PM
To: Patel, Bharat (TBS)
Cc: Petsche, Nadine (TBS)
Subject: FW: OFA-IESO loan

See below – can you see how OFA has this amount recorded – its apparently on the market books.

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]
Sent: January-20-17 3:36 PM
To: Veinot, Cindy (TBS)
Subject: RE: OFA-IESO loan

market

Kimberly Marshall | VP, Corporate Services & CFO
Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1
Web: www.ieso.ca | Twitter: [IESO_Tweets](https://twitter.com/IESO_Tweets) | LinkedIn: [IESO](https://www.linkedin.com/company/ieso)

Corporate Services collaborates with you to deliver solutions and expertise that enable the IESO to achieve its goals.

Conservation: www.saveONenergy.ca | Twitter: [saveONenergyOnt](https://twitter.com/saveONenergyOnt) | LinkedIn: [saveONenergy](https://www.linkedin.com/company/saveONenergy)

From: Veinot, Cindy (TBS) [<mailto:Cindy.Veinot@ontario.ca>]
Sent: January 20, 2017 3:35 PM
To: Kim Marshall

Subject: RE: OFA-IESO loan

*** EXTERNAL email. Please be cautious and evaluate before you click on links, open attachments, or provide credentials. ***

Thanks – is this loan recorded on the accounting books (vs. the market books?)

Cindy

From: Kim Marshall [<mailto:Kim.Marshall@ieso.ca>]

Sent: January-20-17 3:32 PM

To: Veinot, Cindy (TBS)

Subject: OFA-IESO loan

Cindy, the IESO currently has a monthly payable to the OFA. Right now it is in the 100million range support the rpp program. Not sure how that is currently treated by the OFA. thanks

Kimberly Marshall | VP, Corporate Services & CFO

Independent Electricity System Operator (IESO) | T: (416) 969-6232 | C: (416) 545-7202
120 Adelaide Street West, Suite 1600, Toronto, ON M5H 1T1

Web: www.ieso.ca [[ieso.ca](http://www.ieso.ca)] | Twitter: [IESO_Tweets](https://twitter.com/IESO_Tweets) [[twitter.com](https://twitter.com/IESO_Tweets)] | LinkedIn:

[IESO](https://www.linkedin.com/company/ieso) [[linkedin.com](https://www.linkedin.com/company/ieso)]

Corporate Services collaborates with you to deliver solutions and expertise that enable the IESO to achieve its goals.

Conservation: www.saveONenergy.ca [[saveONenergy.ca](http://www.saveONenergy.ca)] | Twitter:

[saveONenergyOnt](https://twitter.com/saveONenergyOnt) [[twitter.com](https://twitter.com/saveONenergyOnt)] | LinkedIn: [saveONenergy](https://www.linkedin.com/company/saveONenergy) [[linkedin.com](https://www.linkedin.com/company/saveONenergy)]

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From: [Ken Kandeepan](#)
To: [Ronald Kwan](#)
Cc: [Anthony Martinello](#); [Kim Marshall](#); [Michael Boll](#); [Mike Manning](#); [Victor Buza](#)
Subject: Re: OFA-IESO, Fair Hydro next steps
Date: Monday, April 24, 2017 10:29:23 PM

I prefer the 26th

Thanks

Ken k

On Apr 24, 2017, at 5:47 PM, Ronald Kwan <Ronald.Kwan@ofina.on.ca> wrote:

Hi,

The 27th would not work.

Ron

From: Anthony Martinello [<mailto:Anthony.Martinello@ieso.ca>]
Sent: April-24-17 17:44
To: Kim Marshall <Kim.Marshall@ieso.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>; Michael Boll <Michael.Boll@ieso.ca>; Mike Manning <Mike.Manning@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; Victor Buza <Victor.Buza@ieso.ca>
Subject: OFA-IESO, Fair Hydro next steps

As the draft Fair Hydro legislation is closer to being finalized.....the legislation is giving more clarity on the IESO's expected funding needs.

I think we should have another call this week to discuss more concrete action items regarding the IESO's funding needs to pay for the Fair Hydro shortfalls/holding regulatory asset amounts.

Please let me know if any of the following times works, afterwhich I will send out an invite:

1hour meeting either:

April 26 2017 4pm

April 27 2017 11am

April 28 2017 2pm

Regards.

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From: [Ronald Kwan](#)
To: [Scott Nelms \(ENERGY\)](#)
Subject: Re: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 3:38:05 PM

Hi Scott,

Understood. And will this be part of the TB Report Back in a couple weeks?

Ron

On Apr 17, 2017, at 3:05 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

If OPG decides it no longer has the ability to purchase the asset permanently, IESO needs a way to finance on a long term basis.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:03 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Thanks. In the latter case, though, would that be assumed not as a temporary situation -- otherwise, why a long term facility?

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On Apr 17, 2017, at 1:30 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

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In addition, there may be circumstances where OPG does not purchase the asset (either due to temporary market conditions or overall capacity issues). Therefore IESO needs the capacity to finance these shortfalls until the market recovers or Province decides on a different course of action. I see this as a contingent fund, which only needs to become available in the event one of these circumstances arise.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 10:52 AM

To: Nelms, Scott (MOF)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro

Hi Scott,

I am likely behind the curve on this.

I could see short term financing needs, especially early on perhaps, but long term financing from the OFA (vs OPG'S SPV)?

Why is that arising?

Thanks,
Ron

Begin forwarded message:

From: Anthony Martinello <Anthony.Martinello@ieso.ca>
Date: April 16, 2017 at 11:55:08 AM EDT
To: Kim Marshall <Kim.Marshall@ieso.ca>, Ronald Kwan <Ronald.Kwan@ofina.on.ca>, Michael Boll <Michael.Boll@ieso.ca>, Mike Manning <Mike.Manning@ofina.on.ca>, Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>, Victor Buza <Victor.Buza@ieso.ca>
Subject: OFA-IESO, discussion re Fair Hydro

Below are the proposed agenda items for our meeting.

Agenda:

1. Draw Amounts

- IESO may need to fund a) Fair Hydro forecast variances (short term), and b) Fair Hydro amounts not purchased by the OPG SPV (long term);
- in order to minimize costs and maximize cash-flow flexibility (matching to OPG SPV buys) – any appetite to amending the current 28 day minimum for draws;

2. IESO's Fair Hydro role

- IESO's credit rating agencies (Moody's Aa2, and DBRS) will examine IESO's credit capacities/solvency – need to update IESO/OFA's credit facilities to remove material adverse effect clauses or similar clauses and acknowledge/agree IESO's role in the Fair Hydro plan and commitment to advance funds

under the credit facility if needed for the Fair Hydro cash-flows.

3.General

General comments regarding IESO's Fair Hydro needs vs. IESO regular ongoing needs (corporate and market)

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From: [Ronald Kwan](#)
To: [Scott Nelms \(ENERGY\)](#)
Subject: Re: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 3:02:32 PM

Hi Scott,

Thanks. In the latter case, though, would that be assumed not as a temporary situation -- otherwise, why a long term facility?

I would have otherwise assumed it was still a temporary situation.

Ron

On Apr 17, 2017, at 1:30 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

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From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 10:52 AM
To: Nelms, Scott (MOF)
Subject: Fwd: OFA-IESO, discussion re Fair Hydro

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From: [Ronald Kwan](#)
To: [Scott Nelms \(ENERGY\)](#)
Subject: Re: OFA-IESO, discussion re Fair Hydro
Date: Monday, April 17, 2017 3:59:20 PM

Thanks Scott.

Has the accounting treatment been discussed in the case of IESO financing through the OFA?
Would it make a difference if the bulk of the Reg asset is sold to OPG in a given year, but some fraction is retained by IESO?

As for other components of the TB Report Back, I would assume that one approval item is the operating asset appropriation amount in Energy for the equity injection. Is that right?

Ron

On Apr 17, 2017, at 3:51 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

I think we want to get as much covered off in the TB sub, so if something needs to be included that seems like the right place. As far as I know nothing has been drafted as everything is focused on landing the legislation.

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: April-17-17 3:38 PM
To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

Hi Scott,

Understood. And will this be part of the TB Report Back in a couple weeks?

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On Apr 17, 2017, at 3:05 PM, Nelms, Scott (MOF) <Scott.Nelms@ontario.ca> wrote:

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To: Nelms, Scott (MOF)
Subject: Re: OFA-IESO, discussion re Fair Hydro

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From: [Ronald Kwan](#)
To: [Steen Hume \(CAB\)](#)
Cc: [Scott Nelms \(ENERGY\)](#); [Hilary Cox \(ENE\)](#); [Gavin He](#)
Subject: Re: OFHP
Date: Tuesday, May 02, 2017 12:16:04 PM
Attachments: [GA - IESO Role and Financing v4 - extract v11.pptx](#)

Hi Steen,

See attached. Happy to discuss. Would you be able to share a copy of the revised deck.

Thanks,
Ron

From: Hume, Steen (ENERGY) <Steen.Hume@ontario.ca>
Sent: May 2, 2017 9:37:12 AM
To: Ronald Kwan
Cc: Scott Nelms (ENERGY); Hilary Cox (ENE)
Subject: RE: OFHP

Thanks Ron. That would be helpful.

Steen

From: Ronald Kwan [<mailto:Ronald.Kwan@ofina.on.ca>]
Sent: May-02-17 9:36 AM
To: Hume, Steen (ENERGY)
Cc: Nelms, Scott (MOF); Cox, Hilary (ENERGY)
Subject: Re: OFHP

Hi Steen,

I had been waiting for comments, but barring that, I can see about sending a draft later this morning.

Ron

On May 2, 2017, at 9:32 AM, Hume, Steen (ENERGY) <Steen.Hume@ontario.ca> wrote:

Good morning Ron. Last week before the Budget, we talked about OFA preparing some content for our TB submission, specifically around your discussion with IESO re enhanced line of credit.

Do you have anything to pass along?

Thanks, Steen

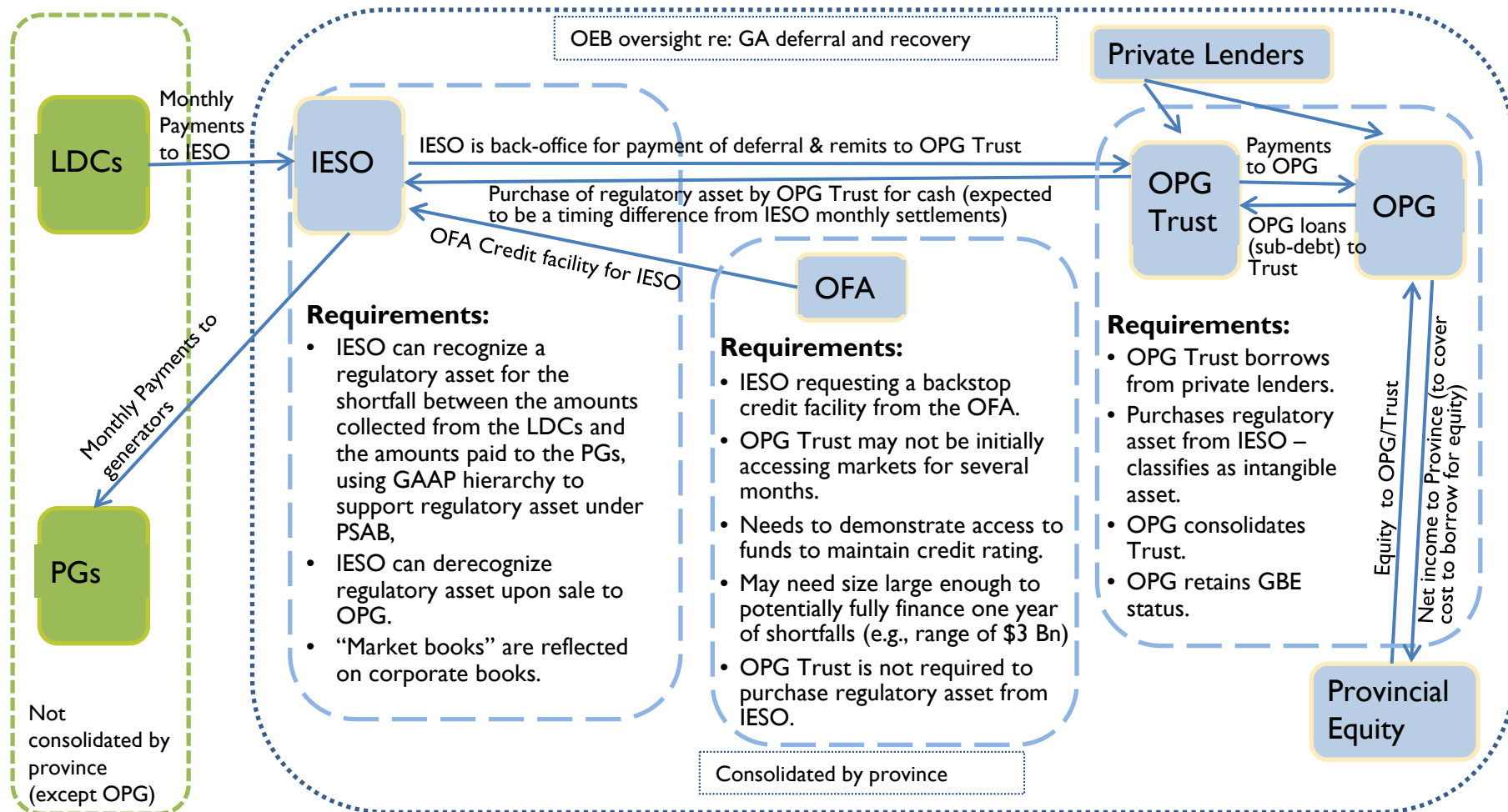
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GA Financing Plan: Role of IESO

Corporate and Electricity Finance Division
May 1, 2017

GA Smoothing – Proposed Structure

- The following diagram provides an overview of the proposed GA smoothing structure, as well as interactions between sector entities and elements required to meet accounting objectives.



► **Note:** Proposed structure is subject to legal and accounting confirmation, absent that confirmation, there would be a fiscal impact to the province.

IESO Financing Requirements

- IESO will need to ensure that it continues to have the funds available to provide payments to generators on a monthly basis as part of the IESO settlements process, while recoveries from LDCs for Regulated Price Plan (RPP) / Fair Hydro Plan eligible customers will be lower.
- IESO has an existing credit facility from the OFA; however, a new or expanded facility is being requested.
- IESO would require financing to compensate generators should it be required to hold any portion of the unpurchased Regulatory Asset beyond each monthly settlement period.
 - OPG Trust is not expected to access public capital markets for several months after the start of the FHP, and may be purchasing the asset with a lag vs monthly settlements. Also, OPG Trust is not required to purchase the regulatory asset.
 - IESO will need a credit facility for interim financing.
 - IESO may require longer-term financing to maintain the deferral financing plan, should the OPG Trust not be able to access debt markets on a timely basis for purchase of some or all of the regulatory asset.
- Based on Ministry of Energy's GA deferral plan, it is estimated that approximately \$2.5-3.0 billion need to be deferred per year for over first 10 years, equal to approximately \$200-250 million per month, on average.¹
 - The size of the credit facility required to backstop IESO could be \$2.5 to \$3.0 billion. [TBC]
- There is a fiscal impact and accounting risk on OFA financing of the IESO requirements if it were to be more than temporary borrowing to cover timing differences on when the OPG SPV buys the regulatory asset vs the timing of IESO monthly settlements.
 - Even if IESO is allowed to recognize the Regulatory Asset, on consolidation into Public Accounts, the regulatory asset would not be expected to be recognised, so that the deferral amount and associated financing costs would be expected to have a fiscal impact..
- The monthly and annual amount being deferred and the resulting monthly amounts can be substantially different than forecast based on various factors, such as seasonality or electricity usage, as well as potential changes to electricity costs from OEB rate decisions, with IESO estimating deferral amounts as high as \$400 million per month.
- Other factors that may increase IESO's financing requirements:
 - IESO will also incur financing charges that will need to be refinanced.
 - The financing and administration costs that OPG Trust incurs will need to be paid.

¹ Based on Ministry of Energy's annual GA deferral amounts, assuming the monthly deferral is equally-weighted.

From: [Ronald Kwan](#)
To: [Steen Hume \(CAB\)](#)
Cc: [Scott Nelms \(ENERGY\)](#); [Hilary Cox \(ENE\)](#)
Subject: Re: OFHP
Date: Tuesday, May 02, 2017 9:36:24 AM

Hi Steen,

I had been waiting for comments, but barring that, I can see about sending a draft later this morning.

Ron

On May 2, 2017, at 9:32 AM, Hume, Steen (ENERGY) <Steen.Hume@ontario.ca> wrote:

Good morning Ron. Last week before the Budget, we talked about OFA preparing some content for our TB submission, specifically around your discussion with IESO re enhanced line of credit.

Do you have anything to pass along?

Thanks, Steen

From: [Ronald Kwan](#)
To: [Steen Hume \(CAB\)](#)
Cc: [Scott Nelms \(ENERGY\)](#); [Hilary Cox \(ENE\)](#); [Gavin He](#)
Subject: Re: OFHP
Date: Tuesday, May 02, 2017 12:30:11 PM

Hi Steen,

I should note, that I did not get comments from all parties at this end, so it's potentially pending further edits.

Ron

From: Ronald Kwan
Sent: May 2, 2017 12:16:03 PM
To: Steen Hume (CAB)
Cc: Scott Nelms (ENERGY); Hilary Cox (ENE); Gavin He
Subject: Re: OFHP

Hi Steen,

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From: [Ronald Kwan](#)
To: [Bruno Amara](#)
Cc: [John Kim](#); [Salman Qadir](#)
Subject: Re: Requirements for OFA to lend to IESO
Date: Thursday, May 04, 2017 4:47:53 PM

Thanks Bruno.

Which MOF Legal counsel is on this file? Are they involved in the Fair Hydro Plan discussions as well?

If OFA needs an OIC on this, would we consider having Energy add that to its submissions, at least as an FYI, and a "Note" in the Minute to say that MOF would be seeking an OIC to be able to respond to IESO's request? As IESO is an agency of Energy, and the FHP is an Energy initiative, I think it would be good to have this facility for IESO and required OIC acknowledged.

Ron

From: Bruno Amara
Sent: May 4, 2017 3:15:21 PM
To: Ronald Kwan
Cc: John Kim; Salman Qadir
Subject: FW: Requirements for OFA to lend to IESO

Hi Ron

Attached is a draft note on process for approval for OFA to lend to the IESO.

Thanks
Bruno

From: [Ronald Kwan](#)
To: [Bruno Amara](#)
Cc: [John Kim](#); [Salman Qadir](#)
Subject: Re: Requirements for OFA to lend to IESO
Date: Thursday, May 04, 2017 5:12:07 PM

Thanks Bruno.

Ron

On May 4, 2017, at 5:06 PM, Bruno Amara <Bruno.Amara@ofina.on.ca> wrote:

Hi Ron

Patrick Rundans is the MoF Legal contact on this question since he is involved usually with OFA Documentation for OICs. Toby Whitfield is the contact on OFHP. We understand that Patrick will connect with Toby but we will follow-up. We will also follow-up with TBS/Energy on having this issue raised in Energy's submissions, through a minute note or otherwise.

Thanks
Bruno

From: Ronald Kwan
Sent: Thursday, May 04, 2017 4:48 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Salman Qadir <Salman.Qadir@ofina.on.ca>
Subject: Re: Requirements for OFA to lend to IESO

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