

SCHOOL ENERGY COALITION

**CROSS-EXAMINATION
MATERIALS**

EB-2011-0054



1 **Undertaking**

2
3 Undertaking LT1.14

4
5 To respond to VECC Technical Conference Question No. 27 and Board Staff Technical
6 Conference Question No. 25.

7
8 **Response**

9
10 Please note Hydro Ottawa Limited (“Hydro Ottawa”) does not propose these rates to be
11 used and has only provided them as they were requested during the Technical
12 conference. In Hydro Ottawa’s opinion the Ontario Energy Board (the “Board”) was clear
13 in its decision related to PowerStream Inc. that only if the distributor had the data to
14 perform a cost allocation approach should it be used. Hydro Ottawa does not have the
15 proper data to create such rates and does not feel the rates prepared as part of this
16 undertaking should be considered. Below Hydro Ottawa has included Board Staff’s
17 Technical Conference question 25. In Hydro Ottawa’s opinion the excerpts provided
18 illustrates Hydro Ottawa’s opinion that class specific Smart Meter rates should not be
19 used.

20
21 Furthermore Hydro Ottawa would urge that the Board, either through Hydro Ottawa’s
22 2012 cost of service decision or through a generic hearing, provide clear guidance as to
23 whether Local Distributor Companies (“LDC’s”) should be required to perform class
24 specific Smart Meter rates when they do not have the required data. This guidance
25 could create efficiencies in future cost of service rate proceedings, as all LDC’s are still
26 to file final Smart Meter costs.

27
28 Board Staff Technical Conference Question 25

29
30 In its Decision (EB-2010-0209) with respect to PowerStream Inc.’s smart meter
31 disposition application in 2010, the Board stated that “the Board is mindful that



1 full cost causality should be the guiding principle.” However, the Board also noted
2 that:

3
4 *“The Board finds that a cost allocation approach based on class specific revenue*
5 *requirement calculations offset by class specific smart meter funding to be*
6 *inconsistent with previous Board decisions, and that there has been no clear*
7 *requirement to track costs by class. The Board notes that historical funding*
8 *collected from customer classes other than Residential and GS<50 kW is not*
9 *material. The Board finds that a class specific calculation of the residual amounts*
10 *for disposition of smart meter costs for each rate class is unwarranted, as there is*
11 *insufficient benefit given the additional complexity.”*

12
13 The Board also noted that a more detailed approach could, depending upon a
14 distributor’s circumstances, result in rate volatility for some customers, and
15 expressed its view that such volatility should be generally avoided.

16
17 Later in that same decision, with respect to PowerStream Inc.’s proposal for a
18 SMIRR, the Board stated:

19
20 *“The Board is mindful that a cost allocation approach for the prospective revenue*
21 *requirement should ideally be based on a class specific revenue requirement*
22 *calculation. However, the Board is concerned about distributors’ ability to track all*
23 *individual costs on a class specific basis at this point in the smart meter initiative,*
24 *given that the instructions that have been issued by the Board in the recent past*
25 *have not included this requirement. The requirements for the tracking of smart*
26 *meter related costs have evolved to the point where no class by class tracking*
27 *has been required since the initial implementation plans were filed. Furthermore,*
28 *a cost allocation methodology in a cost of service rate application is based on*
29 *reasonable cost drivers rather than tracked costs.”*
30



1 In its decision, the Board approved a methodology whereby the smart meter
2 disposition rider was calculated based on an allocation of the return on capital
3 (interest expense and return on equity) and amortization expense proportional to
4 the capital investments for each class.

5
6 The Board will entertain proposals supported by analysis for SMDRs and
7 SMIRRs based on principles of cost causality and where the distributor has the
8 necessary historical and forecasted data.

9
10 Hydro Ottawa has proposed that the Smart Meter Disposition Rider be collected
11 uniformly from all metered customers, even though there are some customers
12 (e.g. Large Users) who do not receive such meters or are not serviced by the
13 associated infrastructure investments.

14
15 Hydro Ottawa tracked the cost of the meter and the installation separately. Additionally
16 Residential costs were recorded separately from Commercial costs (Commercial meters
17 include GS < 50 kW). Demand and collector meters however were not recorded
18 separately. Demand meters are part of the Commercial grouping and collector meters
19 are part of both the Residential and the Commercial grouping.

20
21 To determine the cost of the demand and collector meters, Hydro Ottawa used general
22 assumptions such as the length of time a specific type of meter takes to be installed and
23 the average purchasing price of those meters in a given year. Hydro Ottawa used a
24 meter report to determine how many meters of each group were installed in a given year
25 by meter type. Hydro Ottawa then recalculated the cost of the meter and installation by
26 meter type for both demand and collector type meters by taking the number of meters of
27 each type and multiplying it by the hourly rate, burden rates and average purchasing
28 cost. Hydro Ottawa used this information to calculate the per meter costs by class.
29 Please note this results in all non-standard install costs or savings flowing through the
30 Residential and General Service <50KW class.

31



1 Please find below the per unit cost by class including meter and installation costs.

2

Customer Class	Per Unit Costs (\$)
Residential	145.17
General Service <50KW	371.35
General Service 50-1500KW	794.91
General Service 1500-5000 KW	1,804.27
Large Users	2,022.77

3

4 Please find below the revenue requirement by class and the over and under collection
 5 by class.

6

7

Table 1

Customer Class	Meter Cost	Software and Hardware Costs	OM&A	Interest	Total Revenue Requirement
Residential	15,418,741	1,276,437	6,327,770	(98,613)	22,924,335
General Service <50KW	3,362,862	265,200	532,441	(17,821)	4,142,683
General Service 50-1500KW	1,053,783	603,996	74,631	(7,420)	1,724,990
General Service 1500-5000 KW	41,227	-	-	(177)	41,050
Large Users	7,703	-	-	(33)	7,670
Total	19,884,316	2,145,633	6,934,842	(124,064)	28,840,728

8

9

Table 2

Customer Class	Revenue Collected to December 2011	Total Revenue Requirement	Over/Under collection	2012 average customers	To clear balance after Dec 2011	Proposed rate Rider
Residential	25,558,516	22,924,335	(2,634,181)	280,901	(0.78)	0.16
General Service <50KW	2,348,096	4,142,683	1,794,587	23,636	6.33	0.16
General Service 50-1500KW	329,537	1,724,990	1,395,452	3,313	35.10	0.16
General Service 1500-5000 KW	7,300	41,050	33,751	67	41.98	0.16
Large Users	1,137	7,670	6,533	12	45.37	0.16
Total	28,244,586	28,840,728	596,142	307,929		

10



2.2 Long Term Debt

Hydro Ottawa currently has \$312.185M of long term debt in the form of promissory notes issued to the Holding Company at a weighted cost of 5.321% compared to the 5.258% rate approved in the 2008 Electricity Distribution Rate Application. As noted in section 1.0, a \$45M increase in long term debt has been forecast for the 2011 bridge year and a \$15M increase in long term debt has been forecast for the 2012 test year bringing the weighted cost of long term debt to 5.39%. Long term interest rates are expected to rise from their current levels during the bridge and test years. A summary of the notes and the weighted average cost calculation is shown in Table 1.

Table 1 – Weighted Average Cost of Long Term Debt

Description	Date of Issuance	Principal (\$000's)	Interest Rate (%)	Weighted Debt Rate Cost
Promissory Note to Hydro Ottawa Holding Inc.	July 1, 2005	\$ 200,000	5.140%	2.7621%
Promissory Note to Hydro Ottawa Holding Inc.	July 1, 2005	32,185	5.900%	0.5102%
Promissory Note to Hydro Ottawa Holding Inc.	December 20, 2006	50,000	5.318%	0.7144%
Promissory Note to Hydro Ottawa Holding Inc.	December 21, 2009	15,000	5.85%	0.2357%
Promissory Note to Hydro Ottawa Holding Inc.	April 1, 2010	15,000	5.97%	0.2406%
Promissory Note to Hydro Ottawa Holding Inc.	July 5, 2011	15,000	5.65%	0.2277%
Promissory Note to Hydro Ottawa Holding Inc.	September 1, 2011	15,000	5.75%	0.2317%
Promissory Note to Hydro Ottawa Holding Inc.	December 1, 2011	15,000	5.75%	0.2317%
Promissory Note to Hydro Ottawa Holding Inc.	July 1, 2012	15,000	5.75%	0.2317%
		\$ 372,185		5.39%

HYDRO OTTAWA HOLDING INC.
Issuer

and

THE BNY TRUST COMPANY OF CANADA
Trustee

SERIES 2005-1 SUPPLEMENTAL INDENTURE
Supplementing the Trust Indenture
Dated as of February 4, 2005

and

Providing for the issuance of
\$200,000,000 Principal Amount of 4.93% Senior Unsecured Debentures,
Series 2005-1 due February 9, 2015

February 4, 2005

THIS SERIES 2005-1 SUPPLEMENTAL INDENTURE dated as of the 4 th day of February, 2005

BETWEEN:

HYDRO OTTAWA HOLDING INC.,
a corporation incorporated under the laws of Ontario (the “**Corporation**”)

-and-

BNY TRUST COMPANY OF CANADA, a trust company
incorporated under the laws of Canada (the “**Trustee**”)

WHEREAS the Corporation has entered into a Trust Indenture dated as of February 4, 2005 which provides for the issuance of one or more series of unsecured debentures of the Corporation by way of Supplemental Indentures;

AND WHEREAS this Series 2005-1 Supplemental Indenture is entered into for the purpose of providing for the issue of \$200,000,000 aggregate principal amount of Series 2005-1 Debentures pursuant to the Trust Indenture and establishing the terms and conditions of the Series 2005-1 Debentures to the extent not otherwise established by the Trust Indenture;

NOW THEREFORE this Series 2005–1 Supplemental Indenture witnesses and it is hereby covenanted, agreed and declared as follows:

ARTICLE 1

INTERPRETATION

1.1 To Be Read With Trust Indenture

This Series 2005–1 Supplemental Indenture is a Supplemental Indenture within the meaning of the Trust Indenture. The Trust Indenture and this Series 2005–1 Supplemental Indenture shall be read together and shall have effect so far as practicable as though all the provisions of both indentures were contained in one instrument.

1.2 Definitions

All terms that are defined in the Trust Indenture and used but not defined in this Series 2005–1 Supplemental Indenture shall have the meanings ascribed to them in the Trust Indenture, as such meanings may be amended by this Series 2005–1 Supplemental Indenture. Subject to the foregoing, in this Series 2005-1 Supplemental Indenture and in the Series 2005-1 Debentures, the following expressions have the respective meanings indicated:

“**Canada Yield**” on any date, shall mean the yield to maturity on such date, compounded semi-annually, and calculated in accordance with generally accepted Canadian financial practice, which a non-callable Government of Canada bond would carry if issued, in

Canadian dollars in Canada, at 100% of its principal amount on such date with a term to maturity equal to the remaining term to maturity (calculated from the Redemption Date) of the Debentures, such yield to maturity being the average of the yields provided by two Canadian investment dealers specified by the Corporation.

“Canada Yield Price” shall mean the price equal to the net present value of all scheduled payments of interest (other than accrued and unpaid interest) and principal on the Series 2005-1 Debentures being redeemed, calculated in accordance with generally accepted Canadian financial practice, using as a discount rate the sum of 0.16% and the Canada Yield calculated at 10:00 a.m. (Toronto time) three Business Days prior to the Redemption Date.

“Interest Payment Date” means February 9 and August 9 in each year.

“Interest Period” means the period commencing on the later of the date of issue of the Series 2005-1 Debentures and the immediately preceding Interest Payment Date and ending on the day immediately preceding the Interest Payment Date in respect of which interest is payable.

“Series 2005-1 Debentures” means the \$200,000,000 aggregate principal amount of 4.93% Senior Unsecured Debentures, Series 2005-1 due February 9, 2015 referred to in Section 2.1.

“Trust Indenture” means the Trust Indenture dated as of February 4, 2005 between the Corporation and the Trustee, as amended, supplemented or restated from time to time.

ARTICLE 2

SERIES 2005-1 DEBENTURES

2.1 Creation and Designation

The Corporation is authorized in accordance with the Trust Indenture to issue under this Series 2005-1 Supplemental Indenture a series of debentures designated 4.93% Senior Unsecured Debentures, Series 2005-1 due February 9, 2015, which shall have the terms set out in this Series 2005-1 Supplemental Indenture.

2.2 Limitation on Aggregate Principal Amount

The aggregate principal amount of Series 2005-1 Debentures which may be issued under this Series 2005-1 Supplemental Indenture is limited to \$200,000,000.

2.3 Date and Issue of Maturity

The Series 2005-1 Debentures shall be dated as of their date of issue, expected to occur on February 9, 2005 and will mature on February 9, 2015.

2.4 Interest

The Series 2005-1 Debentures shall bear interest on the unpaid principal amount thereof at a rate of 4.93% per annum from their date of issue calculated semi-annually and payable in arrears on each Interest Payment Date, commencing on August 9, 2005.

2.5 Redemption and Repurchase

The Series 2005-1 Debentures are redeemable at any time pursuant to the provisions of Article 5 of the Trust Indenture in whole or in part before maturity. The Redemption Price for the Series 2005-1 Debentures is the greater of (i) the aggregate principal amount of the Series 2005-1 Debentures to be redeemed and (ii) the Canada Yield Price together, in each case, with accrued and unpaid interest to the Redemption Date.

2.6 Denominations

The Series 2005-1 Debentures shall be issued in denominations of \$1,000 or integral multiples thereof.

2.7 Form of Series 2005-1 Debentures

The Series 2005-1 Debentures and the certificate of the Trustee endorsed thereon shall be issuable initially as one Global Debenture held by or on behalf of, CDS, as depository, for its participants and registered in the name of CDS or its nominee. The Global Debenture will be substantially in the form set out in Schedule 1 with such appropriate additions, deletions, substitutions and variations as the Trustee may approve and shall bear such distinguishing letters and numbers as the Trustee may approve, with such approval to be conclusively deemed to have been given by the Trustee certifying such Series 2005-1 Debentures.

ARTICLE 3 MISCELLANEOUS

3.1 Acceptance of Trust

The Trustee accepts the trusts in this Series 2005-1 Supplemental Indenture and agrees to carry out and discharge the same upon the terms and conditions set out in this Series 2005-1 Supplemental Indenture and in accordance with the Trust Indenture.

3.2 Confirmation of Trust Indenture

The Trust Indenture as supplemented by this Series 2005-1 Supplemental Indenture is in all respects confirmed.

3.3 Counterparts

This Series 2005-1 Supplemental Indenture may be executed in several counterparts each of which so executed shall be deemed to be original and such counterparts together shall constitute one and the same instrument.

IN WITNESS WHEREOF the parties hereto have executed this Series 2005-1 Supplemental Indenture under the hands of their proper officers in that behalf.

HYDRO OTTAWA HOLDING INC.

By: 

Name: Ron Stewart

Title: President and Chief Executive Officer

By: 

Name: Shirley Mears

Title: Senior Vice-President and Chief Financial Officer

BNY TRUST COMPANY OF CANADA

By: 

Name: MARCIA REDWAY
Authorized Officer

Title: _____

SCHEDULE 1

Form of 4.93% Senior Unsecured Debentures, Series 2005-1 due 2015

This Debenture is a Global Debenture within the meaning of the Trust Indenture referred to below and is registered in the name of a Depository or its Nominee. Unless this certificate is presented by an authorized representative of The Canadian Depository for Securities Limited ("CDS") to the Issuer or its agent for registration of transfer, exchange or payment, and any certificate issued in respect thereof is registered in the name of CDS & CO., or in such other name as is requested by an authorized representative of CDS (and any payment is made to CDS & Co. or to such other entity as is requested by an authorized representative of CDS), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL since the registered holder hereof, CDS & CO., has an interest herein.

CUSIP : 44882CAA2

\$200,000,000

HYDRO OTTAWA HOLDING INC.
(incorporated under the laws of Ontario)

SERIES 2005-1 GLOBAL DEBENTURE

Issue Date:	February 9, 2005
Maturity Date:	February 9, 2015
Interest Rate Per Annum:	4.93%
Interest Payment Dates:	February 9 and August 9 in each year
Initial Interest Payment Date:	August 9, 2005
Principal Amount:	\$200,000,000

HYDRO OTTAWA HOLDING INC. (the "**Corporation**") for value received promises to pay to the registered holder of this debenture on the Maturity Date, or on such earlier date as the Principal Amount may become due in accordance with the provisions of the Trust Indenture (as defined below), the Principal Amount in lawful money of Canada on presentation and surrender of this 4.93% Senior Unsecured Debenture, Series 2005-1 due February 9, 2015 (the "Series 2005-1 Debenture") at the principal corporate trust office of the Trustee and to pay interest on the Principal Amount at the Interest Rate Per Annum from the later of the Issue Date and the last Interest Payment Date on which interest has been paid or made available for payment on this debenture, in like money semi-annually on the Interest Payment Dates in each year, commencing on the Initial Interest Payment Date, and if the Corporation at any time defaults in the payment of any principal or interest, to pay interest on the amount in

default at the same rate, in like money, semi-annually on the same dates. Interest shall be paid in the manner provided for in the Trust Indenture.

This Series 2005-1 Debenture is one of an authorized issue of debentures designated 4.93% Debentures, Series 2005-1 due February 9, 2015 forming the first series of debentures issued under a supplemental indenture dated as of February 4, 2005 (the "**Supplemental Indenture**") to a trust indenture (the "**Indenture**") dated as of February 4, 2005, made between the Corporation and BNY Trust Company of Canada (the "**Trustee**"), as Trustee (the Supplemental Indenture and the Indenture collectively referred to herein as the "**Trust Indenture**"). The Trust Indenture specifies the terms and conditions upon which the Series 2005-1 Debentures are issued or may be issued and held and the rights of the holders of the Series 2005-1 Debentures, the Corporation and the Trustee, all of which are incorporated by reference in this Debenture and to all of which the holder of this Series 2005-1 Debenture agrees. To the extent that any provision of this debenture is inconsistent with the provisions of the Trust Indenture, the provisions of the Trust Indenture shall prevail.

The aggregate principal amount of debentures that may be issued pursuant to the Indenture is unlimited. The Series 2005-1 Debentures comprise and are limited to \$200,000,000 aggregate principal amount and are issuable as fully registered debentures in denominations of \$1,000 and integral multiples thereof.

This Series 2005-1 Debenture is a direct unsecured obligation of the Corporation and will rank equally and rateably with all other debentures from time to time issued and outstanding pursuant to the Indenture and with all other unsecured and unsubordinated indebtedness of the Corporation, except to the extent prescribed by law.

The Series 2005-1 Debentures are redeemable at any time at the option of the Corporation in accordance with the provisions specified in the Trust Indenture.

This Series 2005-1 Debenture shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

This Series 2005-1 Debenture shall not become obligatory for any purpose until it shall have been certified by the Trustee in accordance with the Trust Indenture.

IN WITNESS WHEREOF HYDRO OTTAWA HOLDING INC. has caused its corporate seal to be hereunto affixed and this Series 2005-1 Debenture to be signed by its Chief Executive Officer and its Chief Financial Officer.

HYDRO OTTAWA HOLDING INC.

By: _____
Ron Stewart
President and Chief Executive Officer

By: _____
1-2

Shirley Mears
Senior Vice President and
Chief Financial Officer

(Form of Trustee's Certificate)

TRUSTEE'S CERTIFICATE

This Debenture is one of the Series 2005-1 Debentures referred to in the Trust Indenture referred to above.

BNY TRUST COMPANY OF CANADA
As Trustee

By: _____
Authorized Signatory

(FORM OF REGISTRATION PANEL)

**(NO WRITING HEREON EXCEPT BY THE TRUSTEE
OR OTHER REGISTRAR)**

DATE OF REGISTRY	IN WHOSE NAME REGISTERED	SIGNATURE OF TRUSTEE OR OTHER REGISTRAR

OTT_LAW\ 941090\5



HYDRO OTTAWA HOLDING INC.
Issuer

and

THE BNY TRUST COMPANY OF CANADA
Trustee

SERIES 2006-1 SUPPLEMENTAL INDENTURE
Supplementing the Trust Indenture
Dated as of February 4, 2005

and

Providing for the issuance of
\$50,000,000 Principal Amount of 4.968% Senior Unsecured Debentures,
Series 2006-1 due December 19, 2036

Gowling Lafleur Henderson LLP
December 20, 2006

THIS SERIES 2006-1 SUPPLEMENTAL INDENTURE dated as of the 20th day of December, 2006 is made

BETWEEN:

HYDRO OTTAWA HOLDING INC.,
a corporation incorporated under the laws of Ontario (the "**Corporation**")

-and-

BNY TRUST COMPANY OF CANADA, a trust company
incorporated under the laws of Canada (the "**Trustee**")

WHEREAS the Corporation has entered into a trust indenture dated as of February 4, 2005 (the "**Principal Indenture**") which provides for the issuance of one or more series of unsecured debentures of the Corporation by way of Supplemental Indentures;

AND WHEREAS by a Supplemental Indenture dated February 4, 2005 (the "**2005-1 Supplemental Indenture**") the Corporation provided for the issue of \$200,000,000 aggregate principal amount of Series 2005-1 Debentures pursuant to the Principal Indenture and established the terms and conditions of the Series 2005-1 Debentures to the extent not otherwise established by the Principal Indenture;

AND WHEREAS this Series 2006-1 Supplemental Indenture is entered into for the purpose of providing for the issue of \$50,000,000 aggregate principal amount of Series 2006-1 Debentures pursuant to the Principal Indenture and establishing the terms and conditions of the Series 2006-1 Debentures to the extent not otherwise established by the Principal Indenture;

NOW THEREFORE this Series 2006-1 Supplemental Indenture witnesses and it is hereby covenanted, agreed and declared as follows:

ARTICLE 1

INTERPRETATION

1.1 To Be Read With Principal Indenture

This Series 2006-1 Supplemental Indenture is a Supplemental Indenture within the meaning of the Principal Indenture. The Principal Indenture and this Series 2006-1 Supplemental Indenture shall be read together and shall have effect so far as practicable as though all the provisions of both indentures were contained in one instrument.

1.2 Definitions

All terms that are defined in the Principal Indenture and used but not defined in this Series 2006-1 Supplemental Indenture shall have the meanings ascribed to them in the Principal Indenture, as such meanings may be amended by this Series 2006-1 Supplemental Indenture. Subject to the foregoing, in this Series 2006-1 Supplemental Indenture and in the Series 2006-1 Debentures, the following expressions have the respective meanings indicated:

"Canada Yield" on any date, shall mean the yield to maturity on such date, compounded semi-annually, and calculated in accordance with generally accepted Canadian financial practice, which a non-callable Government of Canada bond would carry if issued, in Canadian dollars in Canada, at 100% of its principal amount on such date with a term to maturity equal to the remaining term to maturity (calculated from the Redemption Date) of the Series 2006-1 Debentures, such yield to maturity being the average of the yields provided by two Canadian investment dealers specified by the Corporation.

"Canada Yield Price" shall mean the price equal to the net present value of all scheduled payments of interest (other than accrued and unpaid interest) and principal on the Series 2006-1 Debentures being redeemed, calculated in accordance with generally accepted Canadian financial practice, using as a discount rate the sum of 0.23% and the Canada Yield calculated at 10:00 a.m. (Toronto time) three Business Days prior to the Redemption Date.

"Interest Payment Date" means June 19 and December 19 in each year.

"Interest Period" means the period commencing on the later of the date of issue of the Series 2006-1 Debentures and the immediately preceding Interest Payment Date and ending on the day immediately preceding the Interest Payment Date in respect of which interest is payable.

"Series 2006-1 Debentures" means the \$50,000,000 aggregate principal amount of 4.968% Senior Unsecured Debentures, Series 2006-1 due December 19, 2036 referred to in Section 2.1.

"Trust Indenture" means the Principal Indenture as supplemented by this Series 2006-1 Supplemental Indenture, as amended, further supplemented or restated from time to time.

ARTICLE 2

SERIES 2006-1 DEBENTURES

2.1 Creation and Designation

The Corporation is authorized in accordance with the Trust Indenture to issue under this Series 2006-1 Supplemental Indenture a series of debentures designated 4.968% Senior Unsecured Debentures, Series 2006-1 due December 19, 2036, which shall have the terms set out in this Series 2006-1 Supplemental Indenture.

2.2 Limitation on Aggregate Principal Amount

The aggregate principal amount of Series 2006-1 Debentures which may be issued under this Supplemental Indenture is limited to \$50,000,000.

2.3 Date and Issue of Maturity

The Series 2006-1 Debentures shall be dated as of their date of issue, expected to occur on December 20, 2006 and will mature on December 19, 2036.

2.4 Interest

The Series 2006-1 Debentures shall bear interest on the unpaid principal amount thereof at a rate of 4.968% per annum from their date of issue calculated semi-annually and payable in arrears on each Interest Payment Date, commencing on June 19, 2007.

2.5 Redemption and Repurchase

The Series 2006-1 Debentures are redeemable at any time pursuant to the provisions of Article 4 of the Principal Indenture in whole or in part before maturity. The Redemption Price for the Series 2006-1 Debentures is the greater of (i) the aggregate principal amount of the Series 2006-1 Debentures to be redeemed and (ii) the Canada Yield Price together, in each case, with accrued and unpaid interest to the Redemption Date.

2.6 Denominations

The Series 2006-1 Debentures shall be issued in denominations of \$1,000 or integral multiples thereof.

2.7 Form of Series 2006-1 Debentures

The Series 2006-1 Debentures and the certificate of the Trustee endorsed thereon shall be issuable initially as one Global Debenture held by or on behalf of CDS, as depository, for its participants and registered in the name of CDS or its nominee. The Global Debenture will be substantially in the form set out in Schedule 1 with such appropriate additions, deletions, substitutions and variations as the Trustee may approve and shall bear such distinguishing letters and numbers as the Trustee may approve, with such approval to be conclusively deemed to have been given by the Trustee certifying such Series 2006-1 Debentures.

ARTICLE 3 MISCELLANEOUS

3.1 Acceptance of Trust

The Trustee accepts the trusts in this Series 2006-1 Supplemental Indenture and agrees to carry out and discharge the same upon the terms and conditions set out in this Series 2006-1 Supplemental Indenture and in accordance with the Trust Indenture.

3.2 Confirmation of Trust Indenture

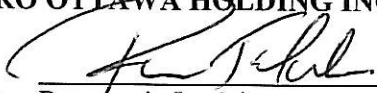
The Principal Indenture as supplemented by this Series 2006-1 Supplemental Indenture is in all respects confirmed.

3.3 Counterparts

This Series 2006-1 Supplemental Indenture may be executed in several counterparts each of which so executed shall be deemed to be original and such counterparts together shall constitute one and the same instrument.

IN WITNESS WHEREOF the parties hereto have executed this Series 2006-1 Supplemental Indenture under the hands of their proper officers in that behalf.

HYDRO OTTAWA HOLDING INC.

By: 
Name: Rosemarie Leclair
Title: President and Chief Executive Officer

By: 
Name: Wojciech Zielonka
Title: Chief Financial Officer

BNY TRUST COMPANY OF CANADA

By: _____
Name: _____
Title: _____


IN WITNESS WHEREOF the parties hereto have executed this Series 2006-1 Supplemental Indenture under the hands of their proper officers in that behalf.

HYDRO OTTAWA HOLDING INC.

By: _____
Name: Rosemarie Leclair
Title: President and Chief Executive Officer

By: _____
Name: Wojciech Zielonka
Title: Chief Financial Officer

BNY TRUST COMPANY OF CANADA

By: 
Name: GEORGE A. BRAGG
Title: VICE-PRESIDENT

SCHEDULE 1

Form of Series 2006-1 Debentures

This Debenture is a Global Debenture within the meaning of the Trust Indenture referred to below and is registered in the name of a Depository or its Nominee. Unless this certificate is presented by an authorized representative of CDS Clearing and Depository Services Inc. ("CDS") to Hydro Ottawa Holding Inc. (the "Issuer") or its agent for registration of transfer, exchange or payment, and any certificate issued in respect thereof is registered in the name of CDS & CO., or in such other name as is requested by an authorized representative of CDS (and any payment is made to CDS & Co. or to such other entity as is requested by an authorized representative of CDS), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL since the registered holder hereof, CDS & CO., has an interest herein. This certificate is issued pursuant to a Master Letter of Representations of the Issuer to CDS, as such letter may be replaced or amended from time to time.

ISIN: CA44882CAB06

Certificate: _____
CUSIP: 44882CAB0

\$50,000,000

HYDRO OTTAWA HOLDING INC.
(incorporated under the laws of Ontario)

SERIES 2006-1 GLOBAL DEBENTURE

Issue Date:	December 20, 2006
Maturity Date:	December 19, 2036
Interest Rate Per Annum:	4.968%
Interest Payment Dates:	June 19 and December 19
Initial Interest Payment Date:	June 19, 2007
Principal Amount:	\$50,000,000

HYDRO OTTAWA HOLDING INC. (the "**Issuer**") for value received promises to pay to the registered holder of this Debenture on the Maturity Date, or on such earlier date as the Principal Amount may become due in accordance with the provisions of the Trust Indenture (as defined below), the Principal Amount in lawful money of Canada on presentation and surrender of this 4.968% Senior Unsecured Debenture, Series 2006-1 due December 19, 2036 (the "**Series 2006-1 Debenture**") at the principal corporate trust office of the Trustee and to pay interest on the Principal Amount at the Interest Rate Per Annum from the later of the Issue Date and the last Interest Payment Date on which interest has been paid or made available for payment on this Debenture, in like money semi-annually on the Interest Payment Dates in each year, commencing on the Initial Interest Payment Date, and if the Issuer at any time defaults in the payment of any principal or interest, to pay interest on the amount in default at the same rate, in like money, semi-annually on the same dates. Interest shall be paid in the manner provided for in the Trust Indenture.

This Series 2006-1 Debenture is one of an authorized issue of Debentures designated 4.968% Senior Unsecured Debentures, Series 2006-1 due December 19, 2036 forming a series of Debentures issued under a supplemental indenture dated as of December 20, 2006 (the "**Supplemental Indenture**") to a trust indenture (the "**Principal Indenture**") dated as of February 4, 2005, made between the Issuer and BNY Trust Company of Canada (the "**Trustee**"), as Trustee (the Supplemental Indenture and the Principal Indenture as amended, supplemented or restated are collectively referred to herein as the "**Trust Indenture**"). The Trust Indenture specifies the terms and conditions upon which the Series 2006-1 Debentures may be issued and held and the rights of the holders of the Series 2006-1 Debentures, the Issuer and the Trustee, all of which are incorporated by reference in this Debenture and to all of which the holder of this Series 2006-1 Debenture agrees. To the extent that any provision of this Debenture is inconsistent with the provisions of the Trust Indenture, the provisions of the Trust Indenture shall prevail.

The aggregate principal amount of Debentures that may be issued pursuant to the Principal Indenture is unlimited. The Series 2006-1 Debentures comprise and are limited to \$50,000,000 aggregate principal amount and are issuable as fully registered Debentures in denominations of \$1,000 and integral multiples thereof.

This Series 2006-1 Debenture is a direct unsecured obligation of the Issuer and will rank equally and rateably with all other debentures from time to time issued and outstanding pursuant to the Principal Indenture and with all other unsecured and unsubordinated indebtedness of the Issuer, except to the extent prescribed by law.

The Series 2006-1 Debentures are redeemable at any time at the option of the Issuer in accordance with the provisions specified in the Trust Indenture.

This Series 2006-1 Debenture shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

This Series 2006-1 Debenture shall not become obligatory for any purpose until it shall have been certified by the Trustee in accordance with the Trust Indenture.

IN WITNESS WHEREOF HYDRO OTTAWA HOLDING INC. has caused its corporate seal to be hereunto affixed and this Series 2006-1 Debenture to be signed by its President and Chief Executive Officer and its Chief Financial Officer.

HYDRO OTTAWA HOLDING INC.

By: _____
Rosemarie Leclair
President and Chief Executive Officer

By: _____
Wojciech Zielonka
Chief Financial Officer

(Form of Trustee's Certificate)

TRUSTEE'S CERTIFICATE

This Debenture is one of the Series 2006-1 Debentures referred to in the Trust Indenture referred to above.

BNY TRUST COMPANY OF CANADA
As Trustee

By: _____
Authorized Signatory

(FORM OF REGISTRATION PANEL)

**(NO WRITING HEREON EXCEPT BY THE TRUSTEE
OR OTHER REGISTRAR)**

Date of Registry	In Whose Name Registered	Signature of Trustee or Other Registrar

OTT_LAW\ 1437228\8

June 21, 2011



Hydro Ottawa Holding Inc.
3025 Albion Road North
Ottawa, Ontario.
K1G 3S4

Attention: Mr. Alan Hoverd, Chief Financial Officer

Dear Mr. Hoverd:

We confirm that, subject to acceptance by you, The Bank of Nova Scotia (the "Bank") will make available to Hydro Ottawa Holding Inc. (the "Borrower") credit facilities on the terms and conditions set out in the attached Terms and Conditions Sheet and in Schedule "A".

If the arrangements set out in this letter, and in the attached Terms and Conditions Sheet and Schedule "A" (collectively the "Commitment Letter") are acceptable to you, please sign the enclosed copy of this letter in the space indicated below and return the letter to us by the close of business on July 22, 2011, after which date this offer will lapse.

This Commitment Letter replaces all previous commitments issued by the Bank to the Borrower.


Yours truly,

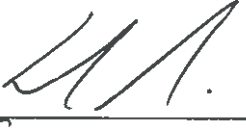
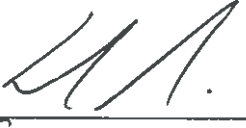

B. Lynch
Senior Credit Solutions Manager


L. Bastianelli
Director, Commercial Banking

With changes to Canadian Accounting Standards commencing January 1, 2011 (i.e. transition to International Financial Reporting Standards ("IFRS"), Private Enterprise GAAP, and Not-for-Profit GAAP), the Bank recommends the Borrower consult with their accounting advisor to assess potential impact and ensure timely transition.

The arrangements set out above and in the attached Terms and Conditions Sheet and Schedule "A" (collectively the "Commitment Letter") are hereby acknowledged and Accepted by:

Hydro Ottawa Holding Inc.
Name
By: 
Title: CHIEF FINANCIAL OFFICER
Date: July 26, 2011


By: 
Title: TREASURER
Date: July 26, 2011

TERMS AND CONDITIONS

CREDIT NUMBER: 01

AUTHORIZED AMOUNT: \$75,000,000

TYPE

364 Day Revolving Term

PURPOSE

To assist with financing day to day general operating requirements.

CURRENCY

Canadian dollars

AVAILMENT

The Borrower may avail the Credit by way of direct advances evidenced by Grid Note and/or Bankers' Acceptances in Canadian dollars in multiples of \$500,000 and having terms of maturity of 7 to 180 days without grace.

INTEREST RATE/FEE

The Bank's Prime Lending Rate from time to time, per annum with interest payable monthly.

ACCEPTANCE FEES

A Bankers' Acceptance Fee of 1.25% per annum, subject to a minimum fee of \$500 per availment, payable at the time of each availment.

OTHER FEES

A Standby Fee of 0.25% per annum on the daily unused portion of the credit, is payable monthly.

DRAWDOWN

Advances are to be made in minimum amounts of \$500,000.

REPAYMENT

The Credit will revolve, and the principal may be drawn, repaid and redrawn at any time until July 12, 2012 (the "Revolving Term Maturity Date"). Unless the Credit is extended, the Credit shall terminate and all amounts outstanding or accrued under the Credit shall be due and payable on the Revolving Term Maturity Date.

The Borrower has the option, provided written notice has been received by the Bank at least 60 days prior to the Revolving Term Maturity Date, to request extension of the Revolving Term Maturity Date for a further period not to exceed 364 days. Any extension of the Revolving Term Maturity Date is subject to the Bank's absolute discretion and written approval.

SPECIFIC SECURITY

The following security, evidenced by documents in form satisfactory to the Bank and registered or recorded as required by the Bank, is to be provided prior to any advances or availment being made under the Credit:

Bankers' Acceptance Agreement

CREDIT NUMBER: 02 AUTHORIZED AMOUNT: \$17,500,000

TYPE

Standby Letters of Credit / Letters of Guarantee

PURPOSE

To provide prudential support to the Independent Electricity System Operator ("IESO") of the Ontario electricity wholesale market operating under the Ontario Electricity Act. The facility may also be used by the Borrower and/or its subsidiaries to secure sundry obligations.

CURRENCY

Canadian dollars

AVAILMENT

The Borrower may avail the Credit by way of Standby Letters of Credit and/or Letters of Guarantee (with each availment subject to completion of an Application and Agreement for Irrevocable Standby Letter of Credit/Letter of Guarantee in a form satisfactory to the Bank) issued for periods not to exceed one year from date of issuance.

COMMISSION

0.50% per annum, calculated on the issue amount, based on increments of 30 days or multiples thereof, from date of issuance to expiry date. Periods of less than 30 days will be counted as a thirty day increment. The amount is subject to the Bank's minimum fee as well as revision at any time and is payable upon issuance.

CREDIT NUMBER: 03 AUTHORIZED AMOUNT: \$50,000,000

TYPE

5 Year Revolving Term

PURPOSE

To assist with financing capital expenditures and permitted acquisitions.

CURRENCY

Canadian dollars

AVAILMENT

The Borrower may avail the unavailed portion of the Credit by way of direct advances evidenced by Promissory Notes and/or Bankers' Acceptances in Canadian dollars in multiples of \$500,000 and having terms of maturity of 30 to 180 days without grace. The unavailed portion of the Credit is subject to Annual Review, which review shall include the general terms and conditions and the Interest Rate and Fees.

INTEREST RATE/FEE

The Bank's Prime Lending Rate from time to time, plus 0.25% per annum with interest payable monthly.

ACCEPTANCE FEES

A Bankers' Acceptance Fee of 2.00% per annum, subject to a minimum fee of \$500 per availment, payable at the time of each availment.

OTHER FEES

A Standby Fee of 0.40% per annum on the daily unused portion of the credit, is payable monthly.

DRAWDOWN

Advances are to be made in minimum amounts of \$500,000.

REPAYMENT

The Credit will revolve, and the principal may be drawn, repaid and redrawn at any time until July 15, 2015 (the "Revolving Term Maturity Date"). Unless the Credit is extended, the Credit shall terminate and all amounts outstanding or accrued under the Credit shall be due and payable on the Revolving Term Maturity Date – June 21, 2016.

SPECIFIC SECURITY

The following security, evidenced by documents in form satisfactory to the Bank and registered or recorded as required by the Bank, is to be provided prior to any advances or availment being made under the Credit:

Banker's Acceptance Agreement.

CREDIT NUMBER: 04

AUTHORIZED AMOUNT: \$150,000

TYPE

Scotiabank VISA Business Card. Availment, interest rate and repayment as per Cardholder Agreement.

CREDIT NUMBER: 05

AUTHORIZED AMOUNT: \$1,000,000

TYPE

Commercial Card. Availment, interest rate and repayment as per Cardholder Agreement.

GENERAL SECURITY, TERMS AND CONDITIONS APPLICABLE TO ALL CREDITS

GENERAL SECURITY

The following security, evidenced by documents in form satisfactory to the Bank and registered or recorded as required by the Bank, is to be provided prior to any advances or availment being made under the Credits:

Negative Pledge Agreement acknowledged and accepted by Hydro Ottawa Holding Inc., Energy Ottawa Inc., Hydro Ottawa Limited and Telecom Ottawa Holding Inc. confirming that they will not further encumber their assets to any other party, except encumbrances within the definition of "Permitted Encumbrance", without the prior written consent of the Bank.

"Permitted Encumbrance" is defined, with respect to Hydro Ottawa Holding Inc., Hydro Ottawa Limited, Energy Ottawa Inc. and Telecom Ottawa Holding Inc., as any of the following:

- (a) purchase money security interests, capital leases and other encumbrances not exceeding in an aggregate amount of \$5,000,000;
- (b) liens for taxes, payments in lieu of taxes, assessments, government charges or claims not yet due or for which instalments have been paid based on reasonable estimates pending final assessments, or if due, the validity of which is being contested in good faith, on in respect of which appropriate provision is made in consolidated financial statements of the Borrower;
- (c) a lien or deposit under workers' compensation, social security or similar legislation or deposits to secure public or statutory obligations;
- (d) a lien or deposit of cash or securities in connection with contracts, bids, tenders, leases or expropriation proceedings or to secure surety and appeal bonds not exceeding an aggregate amount of \$1,000,000 at any time;
- (e) a lien or privilege imposed by law, such as a builder's, carrier's, warehousemen's, landlord's mechanic's, supplier's or other similar liens and public, statutory and other like obligations incurred in the ordinary course of business;
- (f) a lien or right of distress reserved in or exercisable under any lease, for rent or for compliance with the terms of the lease;
- (g) undetermined or inchoate liens, rights of distress, privileges and charges incidental to current operations which have not at such time been filed or exercised or which relate to obligations not due or payable, or if due, the validity of which is being contested diligently and in good faith by appropriate proceedings;
- (h) reservations, limitations, provisos and conditions expressed in any original grants from the Crown or other grants of real or immovable property, or interests therein, which do not materially affect the use of the affected land for the purpose for which it is being used;
- (i) title defects, encroachments or irregularities or other matters relating to title which in the aggregate do not materially impair the use of the affected property for the purpose for which it is used;
- (j) zoning, land use and building restrictions, by-laws, regulations and ordinances of federal, provincial, state, municipal and other governmental authorities, licences, easements, rights-of-way, rights in the nature of easements (including, without limiting the generality of the foregoing, licences, easements, rights-of-way and rights in the nature of easements for railways, sidewalks, public ways, sewers,

- drains, gas, steam and water mains or electric light and power, or telephone and telegraph conduits, poles, wires and cables) which do not materially impair the use of the affected land for the purpose for which it is being used;
- (k) any right reserved to or vested in any municipality or governmental or other public authority by the terms of any lease, licence, franchise, grant or permit acquired by that person or by any statutory provision to terminate any lease, licence, franchise, grant or permit, or to require annual or other payments as a condition for the continuance thereof;
 - (l) security given to a public utility or any municipality or governmental authority when required by such utility or authority in connection with the operations of that person in the ordinary course of business;
 - (m) security for costs of litigation where required by law;
 - (n) attachments, judgements and other similar encumbrances arising in connection with court proceedings; provided that the encumbrances are in existence for less than 30 days after their creation or the execution or other enforcement of the encumbrances is effectively stayed or the claims so secured are being actively contested in good faith and by proper legal proceedings;
 - (o) encumbrances, if any, granted to BNY Trust Company of Canada for and on behalf of each holder of a debt instrument pursuant to a capital markets issuance issued under a Trust Indenture, provided that the Bank is granted the same security and the security granted to Bank ranks on a *pari passu* basis with the capital markets issuance.

The Borrower shall pay the Bank in priority to all amounts owed by the Borrower to Hydro Ottawa Limited, Energy Ottawa Inc. and Telecom Ottawa Holding Inc. The Borrower, Hydro Ottawa Limited, Energy Ottawa Inc., Telecom Ottawa Holding Inc. and the Bank has executed an Inter-Creditor Agreement dated February 19, 2009 pursuant to which amounts owing by the Borrower to the Bank will be paid prior to amounts owing to the other parties to the Agreement.

GENERAL CONDITIONS

Until all debts and liabilities under the Credits have been discharged in full, the following conditions will apply in respect of the Credits:

An event of default shall be deemed to have occurred if the Borrower and/or its subsidiaries further encumber their assets in contravention of the Negative Pledge provided to the Bank.

The Borrower shall provide evidence that borrowings are approved by the Ontario Energy Board or such other regulatory body as may be required under the Energy Competition Act.

Business activities to be restricted to those permitted pursuant to Section 73 of the Ontario Energy Board Act 1998.

Tangible Net Worth (TNW), calculated on the basis of the consolidated results for Hydro Ottawa Holding Inc. is to be maintained in excess of \$175,000,000 at all times.

TNW is defined as the sum of share capital, earned and contributed surplus less (i) amounts due from officers/affiliates, (ii) investments in affiliates, and (iii) intangible assets as defined by the Bank.

The ratio of Total Debt to Capitalization is not to exceed 0.75:1 calculated on the basis of the consolidated results for Hydro Ottawa Holding Inc.

Capitalization is defined as total debt as defined by the Bank plus the sum of share capital, earned and contributed surplus.

Without the Bank's prior written consent, such consent not to be unreasonably withheld or delayed:

No change in ownership is permitted.

No dividends, withdrawals, bonuses, advances to shareholders, management or affiliates are permitted which would place any Bank credit conditions in default.

Guarantees or other contingent liabilities are not to be entered into and assets are not to be further encumbered in excess of \$3,000,000. Other contingent obligations not to be incurred if they would have a material adverse effect on the financial position of the Borrower and its subsidiaries taken as a whole.

Subsidiaries designated as Hydro Ottawa Limited, Energy Ottawa Inc. and Telecom Ottawa Holding Inc., are not to incur further indebtedness (other than inter-corporate indebtedness or indebtedness to/from the Borrower), with the exception of "Permitted Encumbrances" and Lease transactions having an aggregate balance of no greater than \$5,000,000.

No mergers, Permitted Acquisitions* representing more than 40% of TNW or material change in the Borrower's primary line of business are permitted. TNW is calculated on the basis of the Consolidated results for Hydro Ottawa Holding Inc.

*Permitted Acquisitions include any non-hostile Acquisitions with respect to which:

- a) The business of the entity being acquired (in the case of Equity Acquisition) or the assets being acquired are being used in or relate to (in the case of an Asset Acquisition) the Business.**
- b) No Pending Event of Default or Event of Default exists at the time of such proposed Acquisition and no Pending Event of Default or Event of Default would exist immediately after the implementation of such proposed Acquisition.
- c) The Debt to Capitalization covenant would be met, on a pro forma basis, immediately after the implementation of any such Proposed Acquisition.
- d) The Borrower has provided the Bank with notice of such Acquisition at least 5 business days prior to the completion of such Acquisition.

**Business is defined as those business activities permitted pursuant to Section 73 of the Ontario Energy Board Act 1998

Additional terms and conditions in Schedule A are to apply.

If there is any change from the accounting policies, practices and calculation methods used by the Borrower in preparing any part of its financial statements for the fiscal year most recently completed before the date of this Commitment Letter, the Borrower shall provide the Bank with all information that the Bank requires to ensure that reporting provided to the Bank after any changes are comparable to previous reporting. In addition, all calculations made for the purposes of this Commitment Letter shall continue to be made based on the accounting policies, practices and calculation methods in effect as at the date of the financial statements for the most recently completed fiscal year. In the event of a change in the accounting policies, practices and calculation methods, the Bank retains the right (a) to act on any default under the financial covenants or any other terms and conditions as defined in this Commitment Letter that is disclosed by applying the previous accounting policies, practices and calculation methods and (b) at its discretion and acting reasonably, to amend/reset covenants that are affected by the change.

GENERAL BORROWER REPORTING CONDITIONS

Annual Audited Consolidated and Unaudited Unconsolidated Financial Statements, prepared in accordance with the elected Generally Accepted Accounting Principle ("GAAP") applicable at the date of the financial statements, within 120 days of the Borrower's fiscal year end, duly signed.

Copy of approved annual budget to be submitted in conjunction with annual audited consolidated and unaudited unconsolidated financial statements, within 120 days of the Borrower's fiscal year end.

Annual Audited Financial Statements for Hydro Ottawa Limited and Energy Ottawa Inc., prepared in accordance with the elected Generally Accepted Accounting Principle ("GAAP") applicable at the date of the financial statements, within 120 days of the respective fiscal year end, duly signed.

Annual Internally Prepared Financial Statements for Telecom Ottawa Holding Inc, within 120 days of the respective fiscal year end.

Quarterly Interim Consolidated Financial Statements of the Borrower, within 60 days of period, with the exception of 120 days for the period ended December 31st.

Annual certificate signed by the Borrower confirming that all Ministry of Environment requirements are being met and that there are no outstanding active environmental orders.

A Quarterly Compliance Certificate signed by the Chief Financial Officer of the Borrower, certifying that the Borrower is in compliance with all conditions of the credit facility and that there has been no breach of conditions of credit during the quarter, other than as outlined in the Compliance Certificate, within 60 days of the end of each fiscal quarter of the Borrower, with the exception of 120 days of the end of the quarter ended December 31st. The Borrower is also to certify as to compliance/non-compliance with any other Lender.

OTHER FEES AND COMMISSIONS

An Annual Renewal Fee in the amount of \$5,000 is payable by the Borrower each year.

SCHEDULE A
ADDITIONAL TERMS AND CONDITIONS APPLICABLE
TO ALL CREDITS

Calculation and Payment of Interest

1. Interest on loans/advances made in Canadian dollars will be calculated on a daily basis and payable monthly on the 22nd day of each month (unless otherwise stipulated by the Bank). Interest shall be payable not in advance on the basis of a calendar year for the actual number of days elapsed both before and after demand of payment or default and/or judgment.

Interest on Overdue Interest

2. Interest on overdue interest shall be calculated at the same rate as interest on the loans/advances in respect of which interest is overdue, but shall be compounded monthly and be payable on demand, both before and after demand and judgment.

Indemnity Provision

3. If the introduction, adoption or implementation of, or any change in, or in the interpretation of, or any change in its application to the Borrower of, any law, regulation, guideline or request issued by any central bank or other governmental authority (whether or not having the force of law), including, without limitation, any liquidity reserve or other reserve or special deposit requirement or any tax (other than tax on the Bank's general income) or any capital requirement, has due to the Bank's compliance the effect, directly or indirectly, of (i) increasing the cost to the Bank of performing its obligations hereunder or under any availment hereunder; (ii) reducing any amount received or receivable by the Bank or its effective return hereunder or in respect of any availment hereunder or on its capital; or (iii) causing the Bank to make any payment or to forgo any return based on any amount received or receivable by the Bank hereunder or in respect of any availment hereunder determined by the Bank in its discretion, then upon demand from time to time the Borrower shall pay such amount as shall compensate the Bank for any such cost, reduction, payment or forgone return (collectively "Increased Costs") as such amounts are reasonably determined by the Bank and set forth in a certificate to the Borrower.

In the event of the Borrower becoming liable for such Increased Costs, the Borrower shall have the right to prepay in full, without penalty, the outstanding principal balance under the affected credit other than the face amount of any document or instrument issued or accepted by the Bank for the account of the Borrower, including, without limitation, a Letter of Credit, a Letter of Guarantee or a Bankers' Acceptance. Upon any such prepayment, the Borrower shall also pay the then accrued interest on the amount prepaid and the Increased Costs to the date of prepayment together with such amount as will compensate the Bank for the cost of any early termination of its funding arrangements in accordance with its normal practices, as such amounts are calculated in a certificate reasonably prepared by the Bank.

Calculation and Payment of Bankers' Acceptance Fee

4. The fee for the acceptance of each Bankers' Acceptance will be payable on the face amount of each Bankers' Acceptance at the time of acceptance of each draft calculated on the basis of a calendar year for the actual number of days elapsed from and including the date of acceptance to the due date of the draft.

Calculation and Payment of Standby Fee

5. Standby fees shall be calculated daily on the unused portion of Credit Number 01 and Credit Number 03 and payable monthly on the basis of a calendar from the date of acceptance by the Borrower of this Commitment Letter.

Environment

6. The Borrower represents to the bank that (i) neither the Borrower nor any of its subsidiaries is subject to any civil or criminal proceeding or investigation relating to applicable environmental laws and neither it nor any of its subsidiaries is aware of any threatened proceeding or investigation relating to requirements of applicable environmental laws other than for non-material matters arising in the normal course of business none of which, individually or in the aggregate, could reasonably be expected to have a material adverse effect on the Borrower and its subsidiaries, taken as a whole; (ii) each of the Borrower and its subsidiaries has all material permits, licences, registrations and other authorizations required by applicable environmental laws for the operation of its business and the properties which it owns, leases or otherwise occupies; (iii) no hazardous substances are or have been stored or disposed of by the Borrower or any of its subsidiaries or otherwise used in violation of any applicable environmental laws (including, without limitation, release of hazardous substances by the Borrower or any of its subsidiaries at, on or under any property now or previously owned or leased by the Borrower or any of its subsidiaries) that have, or could reasonably be expected to have, a material adverse effect on the Borrower and its subsidiaries taken as a whole.

The Borrower shall and shall cause each of its subsidiaries to operate its business in compliance with applicable environmental laws other than those in respect of which non-compliance could not reasonably be expected to have a material adverse effect on the Borrower and its subsidiaries taken as a whole and operate all property owned, leased or otherwise used by it such that no obligation, including a clean-up or remedial obligation, shall arise under any applicable environmental law other than obligations that could not reasonably be expected to have a material adverse effect on the Borrower and its subsidiaries taken as a whole.

Notice of Drawdown/Payments

7. The Borrower shall give the Bank prior notice of a drawdown or payment of any loan/advance as follows:
- two bank business days when the amount is \$25 million dollars or more excluding any loan/advance required to permit Hydro Ottawa Limited to pay amounts due to the Independent Electrical System Operator ("IESO").
 - Bank business day(s) includes the day of advance/payment.

Initial Drawdown

8. The right of the Borrower to obtain the initial drawdown under the Credit(s) is subject to the condition precedent that there shall not have been any material adverse changes in the financial condition or the environmental condition of the Borrower or any guarantor of the Borrower.

Periodic Review

9. The obligation of the Bank to make further advances or other accommodation available under any Credit(s) of the Borrower under which the indebtedness or liability of the Borrower is payable on demand, is subject to periodic review and to no adverse change occurring in the financial condition or the environmental condition of the Borrower or any guarantor.

Evidence of Indebtedness

10. The Bank's accounts, books and records constitute, in the absence of manifest error, conclusive evidence of the advances made under the Credit Facilities, repayments on account thereof and the indebtedness of the Borrower to the Bank.

Acceleration

11. All indebtedness and liability of the Borrower to the Bank not payable on demand, shall, at the option of the Bank, become immediately due and payable, the security held by the Bank shall immediately become enforceable, and the obligation of the Bank to make further advances or other accommodation available under the Credits shall terminate, if any one of the following Events of Default occurs:
- (i) the Borrower or any guarantor fails to make when due, or at a fixed payment date, by acceleration or otherwise, any payment of interest, principal, fees, commissions or other amounts payable to the Bank;
 - (ii) there is a breach by the Borrower or any guarantor of any other term or condition contained in this Commitment Letter or in any other agreement to which the Borrower and/or any guarantor and the Bank are parties;
 - (iii) any default occurs under any security listed in this Commitment Letter under the headings "Specific Security" or "General Security" or under any other credit, loan or security agreement to which the Borrower and/or any guarantor is a party;
 - (iv) any bankruptcy, re-organization, compromise, arrangement, insolvency or liquidation proceedings or other proceedings for the relief of debtors are instituted by or against the Borrower or any guarantor and, if instituted against the Borrower or any guarantor, are allowed against or consented to by the Borrower or any guarantor or are not dismissed or stayed within 60 days after such institution;
 - (v) a receiver is appointed over any property of the Borrower or any guarantor or any judgement or order or any process of any court becomes enforceable against the Borrower or any guarantor or any property of the Borrower or any guarantor or any creditor takes possession of any property of the Borrower or any guarantor;
 - (vi) any course of action is undertaken by the Borrower or any guarantor or with respect to the Borrower or any guarantor which would result in the Borrower's or guarantor's reorganization, amalgamation or merger with another corporation or the transfer of all or substantially all of the Borrower's or any guarantor's assets;
 - (vii) any guarantee of indebtedness and liability under the Credit Line is withdrawn, determined to be invalid or otherwise rendered ineffective;
 - (viii) any adverse change occurs in the financial condition of the Borrower or any guarantor.
 - (ix) any adverse change occurs in the environmental condition of:
 - (A) the Borrower or any guarantor of the Borrower; or
 - (B) any property, equipment, or business activities of the Borrower or any guarantor of the Borrower.

Costs

12. All reasonable costs, as determined by the Bank, including legal fees incurred by the Bank relative to security and other documentation and the enforcement thereof, shall be for the account of the Borrower and may be charged to the Borrower's deposit account when submitted.

1 "Has Hydro Ottawa issued the September 1st, 2011
2 promissory note to Hydro Ottawa Holding Inc.?
3 And if yes, please provide the amount and rate
4 actually issued."

5 MR. GRUE: That note hasn't been issued yet. It was
6 to be reviewed at the end of Q3, with the remaining
7 forecast.

8 MR. AIKEN: Part (b):

9 "Please provide a copy of the loan agreement
10 between the holding company and its source of the
11 financing that is used to finance Hydro Ottawa."

12 MR. GRUE: This is an interesting question. I guess
13 there wasn't any particular document that we could point
14 to.

15 The holding company uses three sources, basically, to
16 finance its subsidiaries: internal cash, short-term credit
17 facilities and bond issuances.

18 Internal cash, in 2008 we sold our telecom business,
19 and for proceeds of \$63 million, so that was certainly a
20 big source of financing over the last two, three, four
21 years.

22 We have provided a short-term credit facility document
23 in the last year, and I believe we have that again for this
24 year as a handout. And we also have brought the two bond
25 supplementary indentures that were issued in 2005 and 2006
26 which were passed along to Hydro Ottawa Limited.

27 MR. AIKEN: And you have -- oh, okay. I see Patrick
28 undoing some paper here.

1 MR. GRUE: That's why we made him drive up.

2 [Laughter]

3 MS. HELT: Perhaps while they are being handed out we
4 can mark these as exhibits. We will mark the document
5 series 2005-1 supplemental indenture dated February 4th,
6 2005 as Exhibit MT1.5.

7 **EXHIBIT NO. MT1.5: DOCUMENT SERIES 2005-1,**
8 **SUPPLEMENTAL INDENTURE DATED 4 FEBRUARY 2005**

9 MS. HELT: Document MT1.6 -- or Exhibit MT1.6 will be
10 the document entitled series 2006-1 supplemental indenture
11 dated December 20th, 2006.

12 **EXHIBIT NO. MT1.6: DOCUMENT SERIES 2006-1**
13 **SUPPLEMENTAL INDENTURE DATED 20 DECEMBER 2006**

14 MS. HELT: And Exhibit MT1.7 will be a document from
15 Scotiabank dated June 21st, 2011 to the attention of the
16 chief financial officer with respect to an attached terms
17 and conditions sheet, referred to as a commitment letter.

18 **EXHIBIT NO. MT1.7: DOCUMENT FROM SCOTIABANK DATED 21**
19 **JUNE 2011 TO THE ATTENTION OF THE CHIEF FINANCIAL**
20 **OFFICER RE: TERMS AND CONDITIONS SHEET**

21 MR. AIKEN: And then I'm on to my last question,
22 question 35, Exhibit G1, tab 1, schedule 1, attachment AJ.
23 The table on page 3 in part (d) shows the increase in the
24 sentinel lighting revenue-to-cost ratio in 2013 and '14.
25 Which rate class will benefit from the increased revenues
26 from the sentinel class, even though they get lost in the
27 rounding, I am sure.

28 MS. SCOTT: I don't know yet. At the moment I would



5. CAPITAL STRUCTURE AND COST OF CAPITAL

Issue 5.2 - Is the proposed long term debt rate appropriate?

Board Staff Question #51 – Ref: Exh E1-1-1 and Exh A3-1-1, Attachment I

Hydro Ottawa states that it receives its financing through the Holding Company. At p2 of Exh E1-1-1, it states:

All external debt is managed by the Holding Company on behalf of its affiliates to achieve favourable market rates and to maintain a strong credit rating at the parent company level. Hydro Ottawa states that it benefits from this financing arrangement with competitive pricing as it could not place external long term debt in the smaller incremental tranches that it normally receives from the Holding Company. The cost of debt is passed onto Hydro Ottawa on the same terms as the parent when external financing secured by the Holding Company is targeted for Hydro Ottawa, or, in the absence of external financing, the deemed rates as determined by the Board Report on CoC and IRM that are in effect at the time of the financing transaction. Consistent with current and past practice, amortized issuance costs and ten basis points for administration is included in the debt rate.

Please clarify the transaction and administration costs related to long term debt summarized in Table 1 of Exh E1-1-1.

- a) For each of the debt instruments documented in Table 1 of Exh E1-1-1, please identify whether the documented cost of debt has been determined based on:
 - i. The terms of parent company financing plus amortized issuance costs and 10 basis points (0.1%) for administration; or
 - ii. The Board issued deemed debt rates.
- b) The debt issued on July 1, 2005 at 5.14% is noted in the 2008 Financial Statements of Hydro Ottawa Holdings at 4.93%. Is the difference of 0.21% composed of 0.1% for administration costs and 0.11% for amortized issuance costs? Please provide a detailed derivation of the costs.
- c) Please provide the same analysis requested in b) for the other promissory note



issued on July 1, 2005, and the notes issued on December 20, 2006, December 21, 2009, April 1, 2010 and June 1, 2010.

d) Please explain any differences in the levels of transaction costs and administration costs for long term debt prior to and including June 1, 2010.

Response

a) Table 1 summarizes the terms of each promissory note as requested in items a) through d).

Table 1

Date of Issuance	Principal (\$000's)	Actual or Deemed	Interest Rate	Issuance Costs	Admin. Costs	Total Rate
July 1, 2005	200,000	Actual	4.93 %	0.11 %	0.10 %	5.140 %
July 1, 2005	32,185	Deemed	5.900 %	NIL	NIL	5.900 %
Dec. 20, 2006	50,000	Actual	4.968 %	0.25 %	0.10 %	5.318 %
Dec. 21, 2009	15,000	Deemed	5.75 %	NIL	0.10 %	5.85 %
April 30, 2010	15,000	Deemed	5.87 %	NIL	0.10 %	5.97 %
July 5, 2011	15,000	Deemed	5.45 %	0.10 %	0.10 %	5.65 %
Sept. 1, 2011	15,000	Deemed	5.55 %	0.10 %	0.10 %	5.75 %
Dec. 1, 2011	15,000	Deemed	5.55 %	0.10 %	0.10 %	5.75 %
July 1, 2012	15,000	Deemed	5.55 %	0.10 %	0.10 %	5.75 %

1 there is anything further?

2 MR. GRUE: I think the question this morning was more
3 about the 10.7 percent, particularly in '09, what that rate
4 was. I can give you a little more details on those
5 differences between K5.1.2 and E1-1, attachment AF.

6 2008 -- and I will just go back and forth between
7 K5.1.2 and E1-1-1, attachment AF --2008 showed 9.6 percent
8 versus 9.7 percent. It basically is a rounding between
9 different reports.

10 The 2009 was 10.7 versus 10.7; there was no
11 difference.

12 2010, 9.3 percent versus 10.3 percent. The
13 calculation in K5.1.2, the 9.3 percent, was before the gain
14 for accounting purposes.

15 And in 2011, it was 8.4 percent versus 9.58 percent.

16 K5.1.2 is per the pro forma forecast in A3-2-1,
17 attachment L, provided that 8.4 percent. And E1-1-1,
18 9.58 percent was the deemed rate that we used in the rate
19 application.

20 MR. RITCHIE: Moving to the next one, and this is with
21 respect to K5.1.4, which is a response to VECC IR 45, and
22 in part (d) of the response, Hydro Ottawa states that:

23 "The administration fee covers expenses incurred
24 by the holding company which are not covered in
25 the regular service level agreement. These
26 include credit agency fees, ongoing
27 communications meetings with the credit-rating
28 agencies, ongoing meetings and communications

1 with investment bankers, ongoing meetings and
2 communications with cash management and credit
3 facility bankers..."

4 Et cetera.

5 "Executive time for presentation preparation,
6 meetings and travel are typical costs that are
7 covered by the financing administration fee."

8 And again, looking at the grid promissory note that is
9 in Exhibit E1, again, it's an administration charge that's
10 equal to basically ten basis points.

11 I guess on this one I am trying to figure out how
12 these relate to the administration of the debt, or again,
13 are they solely related to maintaining a relationship of
14 the holding company with participants in the financial
15 markets?

16 MR. GRUE: The objective of the ongoing communications
17 with the rating agencies, the investment bankers, et
18 cetera, is to maintain an understanding of the financial
19 markets, both current and forecast, not just to maintain a
20 relationship. Obviously, that information is important as
21 we try to understand financing when we renew our credit
22 agreements, et cetera, what the appropriate rates would be
23 in that, if we were to go to the bond market, perhaps what
24 the rates would be indicative.

25 So it's not just to maintain an ongoing relationship.
26 It is to have, obviously, a good market intelligence of the
27 financial markets.

28 MR. RITCHIE: But I guess then when you are actually

1 negotiating the way it's described in the promissory note
2 you are actually then applying the Board's methodology for
3 establishing I guess what I will call the base rate, as
4 opposed to what in fact you can get in the market for the
5 debt cost?

6 MR. GRUE: So what is your question on that?

7 MR. RITCHIE: Well, I guess, basically to how in fact
8 are you using these ongoing meetings and that to sort of
9 like establish sort of like this market intelligence as to
10 how you, you know -- for what you can raise the debt, and
11 in fact what would be an appropriate rate for sort of these
12 interim issues or lendings between the holding company and
13 Hydro Ottawa.

14 MR. GRUE: Well, the administration side is not just
15 in one instance where you are actually going to do a debt
16 issuance, actual, or whether we use the deemed. As I said,
17 it's an ongoing process. Obviously, we know our credit
18 facility short-term every year. We have to meet with the
19 rating agencies ongoing every year to maintain our credit
20 rating, which also works into our short-term and long-term
21 debt.

22 So it's not specific to one debt issuance or anything.
23 It's really the requirement of the executive and the fees
24 that we have to pay to the rating agencies, et cetera, on
25 an annual basis that go into that admin fee.

26 MR. RITCHIE: Okay. I guess in the part (b), these
27 costs for this administrative activities, as you're
28 classifying them, are they apportioned or allocated, you

1 know, between Hydro Ottawa and the holding company or other
2 affiliates of Hydro Ottawa?

3 MR. GRUE: The administration fee is solely based on
4 the amount of debt issued through notes.

5 MR. RITCHIE: Okay. How do you actually track the
6 time and cost for these activities, I guess, internally?

7 MR. GRUE: We don't specifically track those costs,
8 because they do go across the entire holding company,
9 various business use, like the president, the financial
10 communications, legal, so they are not tracked specifically
11 in one business unit. A number of them, obviously, are in
12 the financial area, where we record all the rating-agency
13 fees and subscription fees to Bloomberg and Consensus, et
14 cetera.

15 MR. RITCHIE: Okay. So you don't have any sort of
16 estimate as to what are your actual costs for this type of
17 activity?

18 MR. GRUE: We don't go through a spreadsheet type
19 analysis, but, as I say, you know, we have the actual costs
20 that we have to pay the rating agencies, renewal of our
21 credit facility, subscription fees, to emulate the OEB
22 methodology, and then obviously it doesn't take
23 much percentage of time in, I would say, those four or five
24 other areas in the holding company of time, of executive
25 that's not allocated out through SLAs to reach, I think
26 it's about 300-and-some-thousand dollars a year that the
27 admin fee adds up to.

28 MR. RITCHIE: Okay --

1 MR. HARPER: Can I -- I think you may have answered
2 the question. I just had a couple of short ones. I think
3 you answered my first one, was, was these costs for the
4 holding company, they are collected through an admin fee,
5 as opposed to being collected through, say, a corporate
6 allocation process, which would have been another way of
7 doing it. And I think you mentioned they are not included
8 in the SLAs, and I just wanted to confirm that.

9 MR. GRUE: That is correct. In many ways it might
10 have been simpler to include them all in the allocation
11 back in 2005 when we did our first actual debt issuance, is
12 when they started, and they were separated at that time,
13 and we have kind of continued that practice.

14 MR. HARPER: And to pick up further, it sounds, just
15 to follow up on Mr. Ritchie's question, you said they were
16 allocated -- they're signed based on the debt issued, so
17 that if there were other affiliates that had debt you would
18 be allocating these admin fees between the various
19 affiliates, including Hydro Ottawa, based on the amount of
20 outstanding debt in each of those affiliates --

21 MR. GRUE: That's correct.

22 MR. HARPER: -- including Hydro Ottawa. Okay. Thank
23 you.

24 MR. RITCHIE: Okay. The next question then -- we are
25 now moving on to issue 5.2, and about the proposed long-
26 term debt rate --

27 MR. RUBENSTEIN: Sorry, if I can just jump in, because
28 I had a similar question in my interrogatories. Can you

1 provide us with the breakdown of -- I mean, you talked
2 about, it was roughly \$300,000 in the administration fees
3 for the various categories. Could you provide us with a
4 breakdown?

5 MR. GRUE: I had that for your Question No. 15, when
6 you asked that, but in the 2012 rate application the admin
7 fees are \$340,000, based on the admin fees attached to the
8 notes, as indicated in one of the tables.

9 MR. RUBENSTEIN: Thank you.

10 MR. RITCHIE: Okay. Moving on, the issue 5.2, the
11 first question under that is referring to Exhibit K5, tab
12 2, schedule 1, and this is a response to Board Staff IR
13 No. 51, and basically in that original interrogatory, part
14 (d) of it asked for an explanation of differences in the
15 levels of the transaction costs and admin costs for long-
16 term debt prior to and including the issuance of June 1,
17 2010.

18 And in the response that was given it only showed the
19 table really under part (a), and so we are asking for the
20 response to part (d) of the interrogatory.

21 MR. GRUE: Sorry, I am not clear on your question. I
22 think you had said you wondered why they are not consistent
23 on all?

24 MR. RITCHIE: No. Well, yes, why they are not
25 consistent. Again, the original part (d) question was,
26 please explain any differences in the levels of transaction
27 costs and admin costs for the long-term debt prior to and
28 including the June 1, 2010 issuance.



1 **4. OPERATING COSTS**

2
3 **Issue 4.1 - Is the overall OM&A forecast for the test year appropriate?**

4
5 Board Staff Question #33 - Ref: Exh D1-1-1 Ref: Hydro Ottawa EB-2010-0133, Exh D1-
6 1-2

7 The table below summarizes OM&A expense for the period 2008 to 2012. Hydro Ottawa
8 states that there can be some inconsistency in the split between operations and
9 maintenance expense, and that operations and maintenance expense should be
10 considered in their totality.

- 11 a) Please confirm that the data entries in the table below are correct.
- 12 b) The data indicate that in 2008, actual OM&A expense was lower than 2008 Board
13 approved for every OM&A expense category.
- 14 i. The variance explanation at Exh D2-1-1 indicates that \$0.6M of the
15 variance is related to unplanned staff vacancies. Would the vacancy
16 allowance of 3% incorporated in the current workforce plan address the
17 variance?
- 18 ii. The variance explanation indicates that another \$0.6M of the variance is
19 related to the impact of smart meters. Has the historical experience been
20 reflected in the current application?
- 21 c) Staff notes that the 2010 actual OM&A expenses of \$53,350,685, are lower than
22 that forecast in Hydro Ottawa's 2011 cost of service application, \$59,644,369.
23 Please explain the factors that contributed to these differences.
- 24
25
26
27



	2008 Approved	2008 Actual	2009 Actual	2010 Actual	2011 Bridge	2012 Forecast	EB-2010-0133	
							2010 Bridge	2011 Forecast
Operations	13,062,448	11,752,560	11,364,065	11,971,416	12,061,906	11,883,322	14,996,358	15,269,439
Maintenance	5,111,153	5,183,949	5,171,079	5,663,033	8,462,994	9,274,548	6,006,658	6,086,041
SubTotal	18,173,601	16,936,509	16,535,144	17,634,449	20,524,900	21,157,870	21,003,016	21,355,480
%Change (year over year)			-2.4%	6.6%	16.4%	3.1%		
%Change (Test Year vs Last Rebasing Year - Actual)						24.9%		
Billing and Collecting	11,716,819	10,365,089	10,233,636	9,142,479	11,925,750	12,085,194	10,579,743	10,840,730
Community Relations	4,759,852	4,588,888	4,594,942	4,932,698	6,093,455	6,911,671	5,459,667	6,607,061
Admin and General	20,679,521	19,738,418	20,670,993	21,641,059	22,790,434	23,736,696	22,601,943	24,163,018
SubTotal	37,156,192	34,692,395	35,499,571	35,716,236	40,809,639	42,733,561	38,641,353	41,610,809
%Change (year over year)			2.3%	0.6%	14.3%	4.7%		
%Change (Test Year vs Last Rebasing Year - Actual)						23.2%		
Total	55,329,793	51,628,904	52,034,715	53,350,685	61,334,539	63,891,431	59,644,369	62,966,289
			0.8%	2.5%	15.0%	4.2%		

1 **Response**

2

3 a) Entries in the table are correct. Actual values by USofA account groupings in the
 4 table agree to submitted values to the Ontario Energy Board (the "Board") by USofA
 5 account and are consolidated into the groupings per the Board guidelines.

6

7 b)

8 i. Yes the updated vacancy allowance assumption would have addressed the
 9 variance. The vacancy assumption of 3% included in the 2012 OM&A is equal to
 10 \$2.5M.

11 ii. Yes. The Smart meter program is winding down. Expenses related to the legacy
 12 meters have been removed and only expenses for Smart meters are included.

13

14 c) Time of Use ("TOU") and MDMR program costs planned but not incurred in 2010 are
 15 required in 2011, and maintenance costs were lower than expected on new meters.

16 Total reduction in spending was \$1.2M for 2010. Delays in hiring and vacancies



2.0 COST DRIVERS

The following is a description of the drivers that have a significant influence on OM&A expenses. Some of the descriptions refer to Exhibits included elsewhere in the evidence. The dollar amounts for each of the drivers represent a net change year-over-year.

Table 2 - OM&A Cost Driver Table (\$Millions)

	2008 Actual	2009 Actual	2010 Actual	2011 Bridge	2012 Test
Opening Balance (Millions)	\$43.7	\$53.4	\$53.8	\$55.0	\$63.1
Workforce Planning Strategy	1.7	0.3	0.3	1.8	0.7
Collective Agreement/Annual progressions	1.4	1.4	1.6	1.8	1.8
Vacancy and Vacancy Allowance			(2.1)	(0.8)	0.4
Other Compensation	-	0.8	1.1	1.5	1.5
Customer Service Strategic Plan (CSSP)	-	-	-	1.1	0.5
Fuel Price and Volume	0.3	(0.3)	0.1	-	-
Environmental Sustainability	-	-		0.1	0.1
Smart Meters & TOU Rate Roll Out	-	-	0.8	1.3	(0.2)
Capitalization Policy Change	5.9	-	-	-	-
Changes in Capital and Allocations	-	(1.4)	(0.7)	(2.2)	(3.0)
Vegetation Management	-	-	0.5	0.6	-
Insurance Costs	-	-	0.1	0.4	-
Bad Debt	-	-	(1.2)	1.0	(0.3)
Inflation				0.7	0.7
Other Costs	0.5	(0.4)	0.7	0.9	0.4
Ending Balance	\$53.4	\$53.8	\$55.0	\$63.1	\$65.7

2.1 Workforce Planning Strategy

The Workforce Planning Strategy has been developed to ensure that the next generation of employees are properly trained and have the appropriate experience to effectively manage Hydro Ottawa to meet the needs of customers. This strategy will increase costs due to the addition of new apprentices, the Engineer in Training program, specific support positions, and management training. Refer to Exhibit D1-5-1, Workforce



Number of Employees (FTEs & Temporary)	Last Rebasing Year 2008	Historical Year 2009	Historical Year 2010	Bridge Year 2011	Test Year 2012
Number of Full-Time Employees					
Executive	6	6	6	5	5
Management	96	101	102	107	127
Non-Union	39	37	38	38	41
Union	388	402	405	407	425
Total	529	546	551	557	598
Number of Temporary Employees					
Executive	0	0	0	0	0
Management	1	0	0	2	2
Non-Union	5	3	3	1	1
Union	4	4	5	5	5
Total	10	7	8	8	8
Total Salary and Wages (\$)					
Executive	791,698	805,687	829,088	701,341	730,466
Management	8,862,186	9,370,149	9,714,911	10,599,039	13,337,017
Non-Union	2,787,422	2,622,382	2,701,294	2,745,259	3,141,466
Union	24,242,591	25,879,165	27,017,395	27,556,918	29,730,587
Total	36,683,897	38,677,382	40,262,688	41,602,556	46,939,536
Total Benefits (\$)					
Executive	177,908	188,093	197,543	182,068	189,350
Management	1,803,966	1,945,918	2,013,229	2,554,404	3,162,336
Non-Union	572,534	559,210	582,860	740,467	838,540
Union	5,507,852	5,943,148	6,191,629	7,444,097	7,919,182
Total	8,062,261	8,636,370	8,985,262	10,921,036	12,109,408
Total Compensation (Salary, Wages, & Benefits) (\$)					
Executive	969,607	993,780	1,026,631	883,409	919,816
Management	10,666,152	11,316,067	11,728,141	13,153,443	16,499,353
Non-Union	3,359,956	3,181,592	3,284,154	3,485,726	3,980,006
Union	29,750,444	31,822,313	33,209,024	35,001,015	37,649,769
Total	44,746,158	47,313,752	49,247,950	52,523,592	59,048,944
Compensation - Average Yearly Base Wages (\$)					
Executive	131,950	134,281	138,181	143,743	149,493
Management	92,094	92,499	95,058	98,252	102,600
Non-Union	72,401	70,684	70,530	72,303	76,747
Union	62,447	64,355	66,660	67,283	69,232
Total	69,354	70,838	73,072	74,213	77,530
Compensation - Average Yearly Overtime (\$)					
Executive	0	0	0	0	0
Management	0	0	0	0	0
Non-Union	0	0	0	0	0
Union	5,295	6,605	6,358	6,025	6,025
Total	5,295	6,605	6,358	6,025	6,025
Compensation - Average Yearly Incentive Pay (\$)					
Executive	34,692	37,676	40,859	34,895	36,290
Management	5,970	11,757	11,902	11,328	12,741
Non-Union	3,245	0	0	0	0
Union	0	0	0	0	0
Total	6,949	17,978	17,978	15,129	15,479
Compensation - Average Yearly Benefits (\$)					
Executive	29,651	29,549	32,924	36,414	37,870
Management	17,891	18,186	18,815	22,407	23,425
Non-Union	9,871	10,754	10,997	17,630	18,634
Union	12,899	14,017	14,136	17,152	17,716
Total	13,619	14,620	14,876	18,355	19,160
Total Compensation (\$)	49,538,906	51,881,632	52,658,511	57,003,607	63,651,951
Total Compensation Charged to OM&A (\$)	35,756,345	36,302,775	37,388,495	41,251,768	46,391,375
Total Compensation Capitalized (\$)	14,805,466	16,139,120	15,809,921	16,317,807	17,849,184



1.8 Asset Management Strategy

Although Hydro Ottawa's asset management strategy focuses predominately on capital assets, some items in the plan are related to OM&A activities. In particular the asset management strategy deals with such items as vegetation management, asset maintenance and spot testing. Refer to Hydro Ottawa's 2011 Asset Management Plan provided as Exhibit B6-1-1 and Exhibit D1-4-2 on Vegetation Management.

1.9 Review of Overhead Allocation and Capitalization

As discussed in Exhibit B1-3-1, Hydro Ottawa changed its accounting estimates in 2007 for allocating overhead costs to capital programs. This had two impacts on the OM&A costs. First, with fewer overhead costs allocated to capital programs, the total OM&A costs increased. Furthermore, to develop a simpler approach for accounting, overhead administration costs are no longer allocated to maintenance programs. This means that these corporate overheads will remain part of the Administration grouping in the Uniform System of Accounts ("USofA") for OM&A expenses. All subsequent years from 2008 to 2012 adhere to this new procedure.

2.0 OM&A COSTS

Table 1 shows the OM&A by year as required by the Board's filing requirements and USofA. These numbers are shown net of allocations out to capital.

Table 1 - OM&A Summary

	USofA	2008 Board Approved \$	2008 Actual \$	2009 Actual \$	2010 Actual \$	2011 Budget \$	2012 Budget \$
Operation		\$13,062,448	\$11,752,560	\$11,364,065	\$11,971,416	\$12,061,906	\$11,883,322
Load Dispatching	5010	2,011,117	2,978,011	3,177,345	3,529,008	3,645,778	3,762,164
Station Buildings and Fixtures	5012	732,357	599,061	623,465	539,573	690,955	717,818



	USofA	2008 Board Approved \$	2008 Actual \$	2009 Actual \$	2010 Actual \$	2011 Budget \$	2012 Budget \$
Trans. Station Equip. – Labour	5014	116,603	78,285	98,211	85,230	150,074	156,056
Trans. Station Equip. - Expenses	5015	27,448	12,480	43,680	33,276	40,559	33,351
Distribution Station Equipment - Labour	5016	243,378	251,317	269,275	407,270	507,013	527,212
Distribution Station Equipment – Expenses	5017	69,984	28,070	108,428	96,116	126,917	86,513
Overhead Distribution Lines and Feeders – Labour	5020	776,621	733,746	743,584	881,355	521,113	475,396
Overhead Distribution Lines and Feeders – Expenses	5025	2,621,470	2,016,977	1,668,647	2,175,304	85,174	96,563
Overhead Distribution Transformers – Operation	5035	1,072,084	9,611	12,295	25,763	18,710	19,441
Underground Distribution Lines – Labour	5040	356,363	544,634	806,140	793,778	529,271	462,525
Underground Distribution Lines – Expenses	5045	1,281,495	1,314,610	1,491,329	1,789,176	1,482,223	1,489,863
Underground Distribution Trans – Operation	5055	47,871	14,164	33,366	2,055	12,996	843
Meter Expense	5065	2,101,464	1,174,985	1,588,162	2,050,800	2,216,836	1,116,453
Miscellaneous Distribution Expense	5085	1,604,193	1,996,609	700,138	(437,287)	2,034,287	2,939,124
Maintenance		\$5,111,153	\$5,183,949	\$5,171,079	\$5,663,033	\$8,462,994	\$9,274,548
Maintenance of Transformer Stations Equipment	5112	116,205	93,206	336,148	246,572	151,862	165,994
Maintenance of Distribution Stations Equipment	5114	761,773	1,234,750	1,049,989	903,779	829,102	917,723
Maintenance of Poles, Towers a Fixtures	5120	75,824	207,011	300,728	332,829	219,079	231,310
Maintenance of Overhead Conductors and Devices	5125	861,632	954,977	738,310	596,879	784,917	806,411
Maintenance of Overhead Services	5130	301,708	430,113	502,993	555,078	568,430	534,097



	USofA	2008 Board Approved \$	2008 Actual \$	2009 Actual \$	2010 Actual \$	2011 Budget \$	2012 Budget \$
Overhead Distribution Lines – Right of Way	5135				0	2,780,512	2,724,551
Maintenance of Underground Conduit	5145	114,200	66,769	174,315	160,720	10,200	8,730
Maintenance of Underground Conductors and Devices	5150	1,263,011	779,433	713,449	1,464,415	1,370,161	1,450,987
Maintenance of Underground Services	5155	361,073	336,843	327,659	272,570	268,665	257,930
Maintenance of Line Transformers	5160	467,410	598,240	451,095	537,266	647,015	653,280
Maintenance of Meters	5175	788,317	482,607	576,393	592,924	833,052	1,523,535
Billing and Collecting		\$11,716,819	\$10,365,089	\$10,233,636	\$9,142,479	\$11,925,750	\$12,085,194
Meter Reading Expense	5310	1,000,000	708,787	497,472	347,829	1,525,732	1,556,256
Customer Billing	5315	6,805,651	6,384,603	6,454,518	6,671,321	7,065,410	7,332,455
Collecting	5320	1,911,160	1,823,584	1,766,044	1,762,472	1,999,608	2,134,783
Collections Charges	5330	-	14	(709)	98	0	0
Bad Debt Expenses	5335	2,000,008	1,448,101	1,516,311	360,760	1,335,000	1,061,700
Community Relations		\$4,759,852	\$4,588,888	\$4,594,942	\$4,932,698	\$6,093,455	\$6,911,671
Community Relations - Sundry	5410	4,515,270	4,388,497	4,470,513	4,748,231	5,892,595	6,727,367
Demonstration and Selling Expenses	5510	244,582	200,391	124,429	184,467	200,860	184,305
Administrative and General		\$20,679,521	\$19,738,418	\$20,670,993	\$21,641,059	\$22,790,434	\$23,736,696
Executive Salaries and Expenses	5605	2,537,200	2,672,170	2,699,842	2,391,053	2,479,926	3,083,243
Management Salaries and Expenses	5610	4,968,391	5,244,002	5,206,365	5,374,218	6,246,764	8,951,189
General Administrative Salaries and Expenses	5615	2,556,915	2,503,658	2,452,624	2,626,505	786,779	941,222
Office Supplies and Expenses	5620	3,749,097	3,439,394	3,356,987	2,676,738	3,004,000	2,900,322
Administrative Expense Transferred – Credit	5625	(3,783,390)	(4,470,835)	(2,445,112)	(1,537,567)	(1,285,084)	(4,689,137)



	USofA	2008 Board Approved \$	2008 Actual \$	2009 Actual \$	2010 Actual \$	2011 Budget \$	2012 Budget \$
Outside Services Employed	5630	724,598	496,031	201,012	1,094,682	1,145,197	1,767,285
Insurance Expenses	5635	325,692	321,100	338,543	619,221	633,291	645,957
Injuries and Damages	5640	672,575	746,130	628,598	450,412	775,432	790,941
Employee Pensions and Benefits	5645	600,000	594,981	605,814	631,147	700,000	728,000
Regulatory Expenses	5655	1,223,250	1,116,045	1,127,054	1,130,116	1,404,456	1,298,157
General Advertising Expenses	5660	-	-	3,843	0	0	0
Miscellaneous General Expenses	5665	2,718,637	2,230,717	2,166,054	1,768,601	2,201,500	2,441,281
Maintenance of General Plant	5675	4,346,556	4,731,062	4,266,187	4,346,361	4,528,173	4,704,837
Charitable Contributions	6205	40,000	113,963	63,182	69,573	170,000	173,400
SUB TOTAL		\$55,329,793	\$51,628,904	\$52,034,715	\$53,350,684	\$61,334,539	\$63,891,432
Taxes Other Than Income Taxes	6105	1,758,250	1,741,965	1,793,952	1,597,804	1,770,695	1,806,109
TOTAL		\$57,088,043	\$53,370,869	\$53,828,667	\$54,948,488	\$63,105,234	\$65,697,541

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2

3 3.0 OPERATIONS AND MAINTENANCE

4

5 The following provides a brief description of the activities required in Operations and
6 Maintenance to properly operate and maintain a local distribution system and provide
7 quality, reliable, cost effective service to customers.

8

9 Operations is defined as work that encompasses actions of a detective, preventative,
10 and/or monitoring nature. Maintenance is defined as the routine activity to ensure the
11 equipment or device operates correctly (generally work performed in a reactionary
12 manner based on the results of an Operation activity).

13

14 Many departments within Hydro Ottawa carry out operations and maintenance functions;
15 however, this responsibility lies primarily with the Construction and Maintenance ("C&M")
16 group. C&M has day-to-day responsibility to carry out construction, maintenance and



5.0 OM&A COST PER CUSTOMER AND PER FTE

Table 4 summarizes OM&A costs year over year as it relates to the number of customers and the number of Full Time Equivalent Employees ("FTE").

Table 4 - OM&A Cost per Customer and FTE

	2008 Actual	2009 Actual	2010 Actual	2011 Bridge Year	2012 Test Year
Number of Customers	291,639	297,007	300,664	307,189	311,918
Total OM&A	\$53,370,869	\$53,828,667	\$54,948,488	\$63,105,234	\$65,697,541
OM&A cost per Customer	\$183.00	\$181.24	\$182.76	\$205.43	\$210.62
Number of FTEs	536.6	557.1	552	558	592
Customers per FTE	543.5	533.1	544.7	550.5	526.9
OM&A cost per FTE	\$99,461	\$96,623	\$99,544	\$113,092	\$110,976

6.0 LOW-INCOME ENERGY CONSUMER PROGRAMS (LEAP)

Hydro Ottawa is committed to providing Conservation and Demand Management ("CDM") programs to its low-income customers and continues to follow provincial guidelines for the delivery of CDM programs. Hydro Ottawa will have a LEAP expense starting in 2011.

7.0 GREEN ENERGY AND GREEN ECONOMY (GEA)

Hydro Ottawa has included expenses in 2012 related to the *Green Energy Green Economy Act* that are ongoing for the five year plan. Please refer to Exhibit B1-2-2, Green Energy Act Plan for further details.



Hydro Ottawa's costs of the 2011 rate application (EB-2010-0133) are contained in the 2010 actual regulatory costs. The OEB and intervenors costs are captured in a sub-account for Account 1508 "other Regulatory Assets" in accordance with the Board's decision on October 27, 2010.

It should be noted that Hydro Ottawa's costs of regulatory staff have not been included in Account 5655. These costs are contained within the general OM&A budgets. Staffs from other departments who work on the preparation of the rate case (such as finance, distribution asset management, treasury, etc.) are also not included in Account 5655. These costs are contained within their departmental budgets.

Table 3 – Regulatory Cost Schedule

Regulatory Cost Category	USofA	2008 Actual \$	2009 Actual \$	2010 Actual \$	2011 Budget \$	2012 Budget \$
1. OEB Annual Assessment	5655	\$761,852	\$894,203	\$764,394	\$748,852	\$775,196
2. OEB Hearing Assessments (applicant initiated)						
3. OEB Section 30 Costs (OEB initiated)						
4. Expert Witness cost for regulatory matters						
5. Legal costs for regulatory matters	5655	129,774	43,863	58,857	331,400	208,829
6. Consultants costs for regulatory matters	5655	27,996	3,223	21,968	40,000	20,000
7. Operating expenses associated with staff resources allocated to regulatory matters						
8. Operating expenses associated with other resources allocated to regulatory matters						
9. Other regulatory agency fees or assessments	5655	90,934	119,293	125,274	122,726	127,044
10. Any other cost for regulatory matters	5655				5,100	5,208
11. Intervenor Costs	5655	105,489	103,017	159,623	156,378	161,880
TOTAL		\$1,116,045	\$1,127,054	\$1,130,116	\$1,404,456	\$1,298,157

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Year	Eligible Year	In	Eligible Cumulative	Actual Retirement	Balance Cumulative
Prior					7
2008	7		14	4	10
2009	18		28	12	16
2010	21		37	11	26
2011 YTD	11		37	8	29
Totals	57			35	

Note: Of 35 actual retirements since 2008, 72% have retired within 6 months of eligible date. 29 remain eligible cumulatively, primarily from 2010 and 2011.

Of the 8 retirements in 2011 to date, 2 became eligible in 2011, 5 in 2010, and 1 in 2008 3 additional staff have provided notice to retire.