

1 **2.5 EXHIBIT 5: COST OF CAPITAL AND RATE OF RETURN**

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2.5.1 CAPITAL STRUCTURE

Welland Hydro-Electric System Corp. ("WHESC") has prepared this 2017 COS Application in accordance with the Board's guidelines provided in the *Report of the Board on Cost of Capital for Ontario's Regulated Utilities* (the "2009 Report") issued on December 11, 2009. For the purposes of preparing this Application, WHESC has used the cost of capital parameters issued by the Board on October 15, 2015 for 2016 cost of service rate applications for rates with effective dates in 2016. WHESC acknowledges it is required to update its cost of capital parameters to reflect the Board issued cost of capital parameters with effective dates in 2017 prior to the issuance of the Board's decision for its Application. WHESC proposes no deviation from the Board's cost of capital methodology.

WHESC's 2013 cost of service rate decision (EB-2012-0173) approved a deemed capital structure of 56% long term debt with a return of 3.78%, 4% short term debt with a return of 2.08% and 40% equity with a return of 8.93%.

Since WHESC's 2013 cost of service rate application, the composition of Long Term Debt has been changed. At that time, WHESC had a long term loan in the amount of \$3,700,000 with TD Securities at a fixed interest rate of 2.87% over a five year period starting in February, 2009 and expiring at the end of January, 2014. The loan was taken out to finance the installation of smart meters and related infrastructure in preparation for time of use billing. Upon expiry of the loan in 2014, WHESC paid the loan in full from cash reserves which were sufficient to meet forecasted cash requirements.

2.5.2 COST OF CAPITAL (RETURN ON EQUITY AND COST OF DEBT)

Return on Equity

As outlined above, for the purposes of preparing this Application WHESC has used the cost of capital parameters issued by the Board on October 15, 2015 for 2016 COS rate applications which reflects a return on equity of 9.19%. WHESC acknowledges it is required to update its cost of capital parameters to reflect the Board issued cost of capital parameters with effective dates in 2017 prior to the issuance of the Board's decision for its Application. The 2017 Test Year has a deemed equity amount of \$13,404,955 which is 40% of total rate base of \$33,512,388.

Cost of Debt: Long Term

WHESC has a promissory note with the City of Welland, its municipal shareholder, for \$13,499,953. The amended and restated promissory note was issued October 15, 2005 with no set term. Currently, the actual interest rate on the promissory note is 6.25%. The promissory note is classified as affiliate debt and is callable since it contains a condition that the principal shall be payable upon 12 months' notice at any given

1 time. A copy of the promissory note is included as Appendix 5-A. WHESC has approached the City of
2 Welland in the past with proposals to pay off the promissory note and replace it with third party debt. To
3 date, the City of Welland has not exercised its option of calling in the promissory note it has with WHESC.

4 In accordance with the 2009 Report, WHESC is requesting a return on the portion of long term debt that
5 the promissory note represents for the 2017 Test Year reflecting the Board's deemed long term debt rate.
6 For the purposes of preparing this Application, WHESC has used the cost of capital parameters issued by
7 the Board on October 15, 2015 for 2016 COS rate applications which reflects a deemed long term debt rate
8 of 4.54%. WHESC acknowledges it is required to update its cost of capital parameters to reflect the Board
9 issued cost of capital parameters with effective dates in 2017 once available, and in any event prior to the
10 issuance of the Board's decision for its Application.

11 WHESC's deemed long term debt for the 2017 Test Year is \$18,766,937, which is 56% of total rate base
12 of \$33,512,388. The difference between the deemed long term debt and the promissory note with the
13 shareholder (City of Welland) is \$5,266,984 and is referred to as Notional Debt. WHESC currently has no
14 other long term debt instruments in place, no recent history of debt financing, and there are no forecasted
15 requirements for long term debt financing thru the 2017 Test Year. As a result, WHESC submits that the
16 deemed long term debt rate, which is the weighted average cost of actual long-term debt, would also apply
17 to this portion of the deemed long term debt.

18 **Cost of Debt: Short Term**

19 For the purposes of preparing this Application, WHESC has used the cost of capital parameters issued by
20 the Board on October 15, 2015 for 2016 COS rate applications which reflects a deemed short term debt
21 rate of 1.65%. The 2017 Test Year has a deemed short term debt amount of \$1,340,496 which is 4% of
22 total rate base of \$33,512,388.

23 WHESC acknowledges it is required to update its cost of capital parameters to reflect the Board issued cost
24 of capital parameters with effective dates in 2017 once available, and in any event prior to the issuance of
25 the Board's decision for its Application.

26 **Capital Structure and Cost of Capital**

27 Tables 5-1 and 5-2 below are a reproduction of Appendix 2-OA that demonstrates the elements of the
28 capital structure and cost of capital from 2013 Board-approved and 2017 Test Year. For 2017, the weighted
29 average cost of capital of 6.28% will be applied to the rate base of \$31,247,738, which is explained in detail
30 in Exhibit 2, to determine a return on rate base of \$2,106,053 that is included in the proposed revenue
31 requirement.

Table 5-1
Appendix 2-OA
2013 COS

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	Debt				
1	Long-term Debt	56.00%	\$17,604,086	3.78%	\$665,434
2	Short-term Debt	4.00%	\$1,257,435	2.08%	\$26,155
3	Total Debt	60.0%	\$18,861,520	3.67%	\$691,589
	Equity				
4	Common Equity	40.00%	\$12,574,347	8.93%	\$1,122,889
5	Preferred Shares		\$ -		\$ -
6	Total Equity	40.0%	\$12,574,347	8.93%	\$1,122,889
7	Total	100.0%	\$31,435,867	5.77%	\$1,814,478

Table 5-2
Appendix 2-OA
2017 Test Year

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	Debt				
1	Long-term Debt	56.00%	\$18,766,937	4.54%	\$852,019
2	Short-term Debt	4.00%	\$1,340,496	1.65%	\$22,118
3	Total Debt	60.0%	\$20,107,433	4.35%	\$874,137
	Equity				
4	Common Equity	40.00%	\$13,404,955	9.19%	\$1,231,915
5	Preferred Shares		\$ -		\$ -
6	Total Equity	40.0%	\$13,404,955	9.19%	\$1,231,915
7	Total	100.0%	\$33,512,388	6.28%	\$2,106,053

Weighted Average Cost of Long-Term Debt

Table 5-3 below is a reproduction of Appendix 2-OB listing WHESC's long term debt instruments and weighted average cost of long term debt from 2013 to the 2017 Test Year.

Table 5-3
Appendix 2-OB
Debt Instruments

Year 2013 Actual										
Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Long Term Note Payable	City of Welland	Affiliated	Fixed Rate	16-Oct-05		\$ 13,499,953	0.0625	\$ 843,747.06	
2	Long Term Loan	TD Securities	Third-Party	Fixed Rate	6-Feb-09	5	\$ 3,700,000	0.0287	\$ 106,190.00	
Total							\$ 17,199,953	0.055229	\$ 949,937.06	
Year 2014 Actual										
Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Long Term Note Payable	City of Welland	Affiliated	Fixed Rate	16-Oct-05		\$ 13,499,953	0.0625	\$ 843,747.06	
2	Long Term Loan	TD Securities	Third-Party	Fixed Rate	6-Feb-09	5	\$ 3,700,000	0.0023916	\$ 8,849.00	End Date Feb 1/14
Total							\$ 17,199,953	0.0495697	\$ 852,596.06	
Year 2015 Actual										
Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Long Term Note Payable	City of Welland	Affiliated	Fixed Rate	16-Oct-05		\$ 13,499,953	0.0625	\$ 843,747.06	
2										
Total							\$ 13,499,953	0.0625	\$ 843,747.06	
Year 2016 Bridge Year										
Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Long Term Note Payable	City of Welland	Affiliated	Fixed Rate	16-Oct-05		\$ 13,499,953	0.0625	\$ 843,747.06	
2										
Total							\$ 13,499,953	0.0625	\$ 843,747.06	
Year 2017 Test Year										
Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Long Term Note Payable	City of Welland	Affiliated	Fixed Rate	16-Oct-05		\$ 13,499,953	0.0454	\$ 612,897.87	
2									\$ -	
Total							\$ 13,499,953	0.0454	\$ 612,897.87	

Profit or Loss on Redemption of Debt or Preferred Shares

There is no profit or loss on redemption of debt or preferred shares.

2.5.3 NOT-FOR-PROFIT CORPORATIONS

A Reserve Requirement is not applicable because WHESC is a for-profit corporation.

1

APPENDIX – 5-A

2

Promissory Note with the City of Welland



CITY OF WELLAND

Office of the City Clerk

60 East Main Street

Welland, ON L3B 3X4

Phone: 905-735-1700 Fax: 905-732-1919

E-mail: craig.stirtzinger@welland.ca



COPY

November 21, 2005

Mr. Ross Peever, CEO & President
Welland Hydro-Electric System Corporation
950 East Main Street, P.O. Box 280
Welland, Ontario
L3B 5P6

Dear Mr. Peever:

Please be advised that I have received by email on November 17, 2005 the Amended and Restated Promissory note (with 6.25% interest rate) dated as of October 19, 2005 and approved by resolution of the Welland Hydro-Electric System Corporation on November 16, 2005.

This document has been reviewed by the City Solicitor and appears to be in accordance with the resolution of the Welland City Council passed on November 1, 2005.

Yours very truly,

CRAIG A. STIRTZINGER,
City Clerk.

CAS:cv

c.c. – T. Fitzpatrick, City Manager
-- G. Bank, City Solicitor
-- Mayor Damian Goulbourne



WELLAND HYDRO-ELECTRIC SYSTEM CORP.	RESOLUTION	Date Issued: Nov. 16, 2005
		Date Revised:
		Approval:
		Resolution #: 11/16/05-01

AMENDED AND RESTATED PROMISSORY NOTE

WHEREAS:

Pursuant to the Transfer By-Law No. 2000-91 of the Corporation of the City of Welland passed on June 27, 2000, Welland Hydro-Electric System Corp. issued and delivered to the City a Promissory Note dated as of July 1, 2000, in the principal sum of Fourteen million, two hundred and twenty-one thousand, six hundred and twenty-two dollars, (\$14,221,622) and;

WHEREAS:

The original Note was amended and restated on December 31, 2002 to adjust the principal sum to \$13,499,953 from \$14,221,622.

WHEREAS:

For OEB rate setting purposes it is desirable to fix an interest rate in the Note at the OEB deemed rate of 6.25% per annum, from May 1, 2006 to be paid no later than twelve (12) months from the date of demand in writing by the City.

WHEREAS:

The City at its November 1, 2005 meeting directed the Borrower to remove the clause in the October 19, 2005 Promissory Note which states "This Promissory Note is not assignable by the City of Welland without the consent of the Borrowers".

THEREFORE BE IT RESOLVED THAT:

The Chair and the President be authorized to sign the Amended and Restated Promissory Note dated as of the 19th day of October, 2005, and

Resolution 10/19/05-01 is hereby rescinded.

MOVED BY:

M. Dzugan

SECONDED BY:

M. Bishop

DATE:

Nov 16/05

CARRIED:

R. Clutterbuck

AMENDED AND RESTATED PROMISSORY NOTE

WHEREAS pursuant to the Transfer By-Law No. 2000-91 (the "Transfer By-Law") of the Corporation of the City of Welland (the "City") passed on the 27th day of June, 2000, Welland Hydro-Electric System Corp. (the "Borrower") issued and delivered to the City a Promissory Note dated as of the 1st day of July, 2000, in the principal sum of Fourteen Million, Two Hundred and Twenty-one Thousand, Six Hundred and Twenty-two Dollars (\$14,221,622) (the "Original Promissory Note") as partial satisfaction of the purchase price payable by the Borrower to the City for the Distribution Assets (as such term is defined in the Transfer By-Law);

AND WHEREAS the City and the Borrower amended and restated the Original Promissory Note as of December 31, 2002 to evidence a reduction in the principal sum;

AND WHEREAS the Original Promissory Note and the amended and restated Promissory Note dated as of December 31, 2002 are hereinafter collectively referred to as the "Revised Note";

AND WHEREAS the City and the Borrower wish to amend and restate the Revised Note to evidence the addition of interest payable;

AND WHEREAS the City at its November 1, 2005 meeting directed the Borrower to remove the clause in the October 19, 2005 Promissory Note which states "This Promissory Note is not assignable by the City of Welland without the consent of the Borrowers".

AND WHEREAS this Promissory Note amends, restates and replaces the Revised Note;

FOR VALUED RECEIVED, the Borrower hereby promises to pay to or to the order of the City of Welland the principal sum of Thirteen Million, Four Hundred and Ninety-nine Thousand, Nine Hundred and Fifty-three Dollars (\$13,499,953), with interest thereon from May 1, 2006 at the rate of six and one-quarter (6.25%) percent per annum, on a date which is no later than twelve (12) months from the date of demand in writing by the City.

The interest rate may be changed by the City by providing the Borrower with three (3) months prior written notice of the revised interest rate.

The terms of this Promissory Note are subject to the adjustment provisions of the Transfer By-Law. Adjustments made to the terms of this Promissory Note pursuant to the provisions of the Transfer By-Law shall be effective upon three (3) months' written notice to the Borrower by the City.

Except as provided above, any of the terms of this Promissory Note may be revised, changed or restated by the City in consultation with the Borrower upon one year's prior written notice of the City to the Borrower.

Upon due execution and delivery of this Promissory Note, the Original Promissory Note shall be deemed to be amended and restated in its entirety and shall be of no further force and effect.


DATED as of the 18th day of October, 2005.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Per:


Tim Clutterbuck, Chair

Per:


Ross Praeger, President