# EXHIBIT 5: <br> COST OF CAPITAL AND <br> RATE OF RETURN 

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### 2.5 EXHIBIT 5 - COST OF CAPITAL AND RATE OF RETURN

The purpose of this evidence is to summarize the method and cost of financing capital requirements for the 2021 Test Year.

### 2.5.1 CAPITAL STRUCTURE

NBHDL has a current deemed capital structure of $56 \%$ long term debt with a return of $4.24 \%, 4 \%$ short term debt with a return of $2.16 \%$ and $40 \%$ equity with a return of $9.30 \%$ as approved in the 2015 cost of service ("COS") rate decision EB-2014-0099.

NBHDL has prepared this 2021 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, NBHDL has used the cost of capital parameters issued by the Board on November 9, 2020 for 2021 cost of service rate applications for rates with effective dates in 2021. NBHDL proposes no deviation from the Board's cost of capital methodology.

### 2.5.1.1 Return on Equity

As outlined above, for the purposes of preparing this Application NBHDL has used the cost of capital parameters issued by the Board on November 9, 2020 for 2021 COS rate applications which reflects a return on equity of $8.34 \%$.

### 2.5.1.2 Cost of Debt: Long Term

NBHDL is requesting a return on long term debt for the 2021 Test Year of $2.48 \%$. This rate of return represents the weighted average cost of long-term debt that NBHDL currently holds with Toronto-Dominion Bank ("TD") for multiple SWAP loan agreements representing annual lending from 2014 through 2020, and anticipated lending in the 2021 Test Year. NBHDL would note that this rate is lower than the OEB's most recently announced deemed long-term debt rate of $2.75 \%$ and reflects favourable financing rates that NBHDL has been able to negotiate with its lender with benefits that flow to the rate payer through lower interest costs incorporated into rates.

NBHDL entered into a financing agreement with Infrastructure Ontario on November 19, 2009 for $\$ 3,500,000$ to finance the Smart Meter project. This financing agreement was converted to a 10 -year debenture with Infrastructure Ontario on April 15, 2011 for $\$ 3,500,000$ at a rate of $3.9 \%$ maturing on April 15,2021 . The principal balance at the end of the 2021 Test Year is $\$ 0$. The average principal amount owing in 2021 on this loan is $\$ 24,416$. This loan carries an immaterial interest cost of $\$ 974$.

NBHDL signed an ISDA Master Agreement on September 26, 2014 and the trade confirmation was completed on October 1, 2014 with an effective date of October 2, 2014. The ISDA covers all SWAPs that

NBHDL enters into. NBHDL entered into its first SWAP agreement in 2014 and has continued to do so on an annual basis since.

For both the short-term and long-term bank debt NBHDL has a general security agreement in favour of TD as a "Second Charge" security covering all company assets; Infrastructure Ontario ("IO") has a first charge and TD and IO have Pari-Passu Agreements in place.

In the 2015 COS application, NBHDL had a promissory note with the City of North Bay ("CNB"), its municipal shareholder, for $\$ 19,511,601$. On January 25, 2016, the City of North Bay called the promissory note that was originally issued March 17, 2003 with an anticipated settlement date of November 1, 2016. The actual interest rate on the promissory note was $5 \%$, with rates incorporating the loan at $4.88 \%$ (the deemed longterm debt rate at that time). In July 2016, NBHDL entered into a credit facility with TD to put into place borrowing options that covered all financing requirements for the company until 2020. The agreement provided for replacement lending to cover the promissory note called by the CNB and provided for capital financing up to \$26M over the 2016-2020 period. NBHDL had the capability of drawing down in the capital facility in multiple installments and did so on an annual basis. In November 2016, TD entered into a SWAP agreement with TD for the CNB replacement loan at a rate of $2.5 \%$.

Table 5-1 below provides a summary of the loans currently in place. NBHDL forecasted 2021 lending at a rate of $2.06 \%$, approximately $0.5 \%$ above the 2020 interest rate that was locked in September 2020. This increase is aligned with the long-term forecast from TD Economics released in September 2020. NBHDL has forecasted obtaining the loan in December and has accounted for one month of interest expense and the appropriate pro-rated principal balance. NBHDL notes that the forecasted rate is lower than the deemed long-term debt rate.

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Table 5-1: Long-Term Debt

| Loan Detail | Year | Term | Interest Rate | P\&I <br> Payments | Loan |  | 2021 Test Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Date | Amount | Year-End Balance | Average Principal Balance |
| Infrastructure Ontario - due April 15, 2021 | 2011 | 10 | 3.90\% | \$29,403 | April 15, 2011 | \$3,500,000 | \$0 | \$24,416 |
| TD - SWAP - due October 2024-2014 term loan | 2014 | 10 | 3.095\% | \$38,800 | October 2, 2014 | \$4,000,000 | \$1,261,455 | \$1,489,758 |
| TD - SWAP - due October 2025-2015 term loan | 2015 | 10 | 2.45\% | \$56,426 | October 15, 2015 | \$6,000,000 | \$2,475,013 | \$2,805,796 |
| TD - SWAP - due November 2036-CNB replacement loan | 2016 | 20 | 2.50\% | \$103,331 | November 1, 2016 | \$19,500,000 | \$15,425,765 | \$15,884,080 |
| TD - SWAP - due November 2026-2016 term loan | 2016 | 10 | 2.36\% | \$46,817 | November 30, 2016 | \$5,000,000 | \$2,607,760 | \$2,875,847 |
| TD - SWAP - due October 2027-2017 term loan | 2017 | 10 | 2.88\% | \$48,004 | October 2, 2017 | \$5,000,000 | \$3,089,771 | \$3,350,660 |
| TD - SWAP - due December 2028-2018 term loan | 2018 | 10 | 3.55\% | \$44,604 | December 3, 2018 | \$4,500,000 | \$3,313,178 | \$3,536,310 |
| TD - SWAP - due September 2029-2019 term loan | 2019 | 10 | 2.37\% | \$51,524 | September 3, 2019 | \$5,500,000 | \$4,373,491 | \$4,650,886 |
| TD - SWAP - due September 2030-2020 term loan | 2020 | 10 | 1.56\% | \$54,034 | September 15, 2020 | \$6,000,000 | \$5,300,147 | \$5,604,744 |
| TD - SWAP - forecast - 2021 term loan | 2021 | 10 | 2.06\% | \$57,215 | December 1, 2021 | \$6,200,000 | \$6,200,000 | \$516,667 |
| Total Principal Balances |  |  |  |  |  |  | \$44,046,579 | \$40,739,163 |

### 2.5.1.3 Cost of Debt: Short Term

For the purposes of preparing this Application, NBHDL has used the cost of capital parameters issued by the Board on November 9, 2020 for 2021 COS rate applications which reflects a deemed short term debt rate of $1.75 \%$. NBHDL proposes no deviation from the Board's cost of capital methodology.

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

Table 5-2 below is a reproduction of Appendix 2-OA that demonstrates the elements of the capital structure and cost of capital for the 2015 Board-approved and 2021 Test Year. For 2021, the weighted average cost of capital of $4.80 \%$ will be applied to the rate base of $\$ 76,227,486$, which is explained in detail in Exhibit 2, to determine a return on rate base of $\$ 3,655,772$ that is included in the proposed revenue requirement.

## Table 5-2: Capital Structure and Cost of Capital (Appendix 2-OA)

Year: 2015 Board Approved

| $\begin{array}{r} \text { Line } \\ \text { No. } \end{array}$ | Particulars | Capitalization Ratio |  |  | Cost Rate | Return |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt |  | (\%) |  | (\$) | (\%) | (\$) |
|  |  |  |  |  |  |  |
| 1 | Long-term Debt | 56.00\% |  | \$34,058,537 | 4.24\% | \$1,444,504 |
| 2 | Short-term Debt | 4.00\% | (1) | \$2,432,753 | 2.16\% | \$52,547 |
| 3 | Total Debt | 60.0\% |  | \$36,491,290 | 4.10\% | \$1,497,051 |
| Equity |  |  |  |  |  |  |
| 4 | Common Equity | 40.00\% |  | \$24,327,527 | 9.30\% | \$2,262,460 |
| 5 | Preferred Shares |  |  | \$ - |  | \$ |
| 6 | Total Equity | 40.0\% |  | \$24,327,527 | 9.30\% | \$2,262,460 |
| 7 | Total | 100.0\% |  | \$60,818,816 | 6.18\% | \$3,759,511 |

## Year: 2021 Test Year

| Line |  |
| ---: | :--- |
| No. | Particulars |

$\xrightarrow{\text { Capitalization Ratio }}$
$\qquad$
(\%)
Return
(\$)

| Debt |
| :--- |
| Long-term Debt |
| Short-term Debt |
| Total Debt |


|  |  |  |
| ---: | ---: | ---: |
| $56.00 \%$ |  | $\$ 42,687,392$ |
| $4.00 \%$ | $(1)$ | $\$ 3,049,099$ |
| $60.0 \%$ | $\$ 45,736,492$ |  |

$\begin{array}{r}2.48 \% \\ 1.75 \% \\ \hline 2.43 \% \\ \hline \hline\end{array}$

| $\$ 1,059,464$ |
| ---: |
| $\$ 53,359$ |
| $\$ 1,112,823$ |

Equity

7

| Common Equity |
| :--- |
| Preferred Shares |
| Total Equity |
|  |
| Total |


| $40.00 \%$ | $\$ 30,490,994$ <br> $\$-$ |
| ---: | ---: |
| $40.0 \%$ | $\$ 30,490,994$ |
| $100.0 \%$ | $\$ 76,227,486$ |



| $\$ 2,542,949$ |
| ---: |
| $\$-$ |
| $\$ 2,542,949$ |

$\$ 3,655,772$

# North Bay Hydro Distribution Ltd. 

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Year 2019 Actual

| Row | Description | Lender | Affiliated or Third-Party | Fixed or Variable- | Start Date | Term (years) | Principal (\$) | $\begin{array}{\|c\|} \hline \text { Rate (\%) } \\ \text { (Note 2) } \end{array}$ | Interest (\$) <br> (Note 1) | Additional Comments, if any |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Smart Meter Loan | Infrastructure Ontario | Third-Party | Fixed Rate | 15-Apr-11 | 10 | \$ 466,667 | 3.08\% | \$ 25,189 | Actual interest rate |
| 2 | Capital Loan 2014 | TD | Third-Party | Fixed Rate | 2-Oct-14 | 10 | \$ 2,087,670 | 3.10\% | \$ 70,304 | Actual interest rate |
| 3 | Capital Loan 2015 | TD | Third-Party | Fixed Rate | 15-Oct-15 | 10 | \$ 3,677,036 | 2.45\% | \$ 97,155 | Actual interest rate |
| 4 | Capital Loan 2016 | TD | Third-Party | Fixed Rate | 30-Nov-16 | 10 | \$ 3,584,016 | 2.36\% | \$ 90,259 | Actual interest rate |
| 5 | Replacement loan (CNB) | TD | Third-Party | Fixed Rate | 1-Nov-16 | 10 | \$17,090,718 | 2.50\% | \$ 436,497 | Actual interest rate |
| 6 | Capital Loan 2017 | TD | Third-Party | Fixed Rate | 2-Oct-17 | 10 | \$ 4,035,269 | 2.88\% | \$ 122,293 | Actual interest rate |
| 7 | Capital Loan 2018 | TD | Third-Party | Fixed Rate | 3-Dec-18 | 10 | \$ 4,118,330 | 3.55\% | \$ 152,596 | Actual interest rate |
| 8 | Capital Loan 2019 | TD | Third-Party | Fixed Rate | 3-Sep-19 | 10 | \$ 1,769,641 | 2.37\% | \$ 41,940 | Actual interest rate, average principal |
|  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  | \$36,829,347 | 2.81\% | \$ 1,036,234 |  |

Year 2020 Bridge Year

| Row | Description | Lender | Affiliated or Third-Party Debt? | Fixed or VariableRate? | Start Date | Term (years) | Principal (\$) | Rate (\%) (Note 2) | Interest (\$) <br> (Note 1) | Additional Comments, if any |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Smart Meter Loan | Infrastructure Ontario | Third-Party | Fixed Rate | 15-Apr-11 | 10 | \$ 116,667 | 2.57\% | \$ 11,980 | Actual interest rate |
| 2 | Capital Loan 2014 | TD | Third-Party | Fixed Rate | 2-Oct-14 | 10 | \$ 1,680,947 | 3.10\% | \$ 58,876 | Actual interest rate |
| 3 | Capital Loan 2015 | TD | Third-Party | Fixed Rate | 15-Oct-15 | 10 | \$ 3,083,379 | 2.45\% | \$ 83,451 | Actual interest rate |
| 4 | Capital Loan 2016 | TD | Third-Party | Fixed Rate | 30-Nov-16 | 10 | \$ 3,101,513 | 2.36\% | \$ 79,389 | Actual interest rate |
| 5 | Replacement loan (CNB) | TD | Third-Party | Fixed Rate | 1-Nov-16 | 10 | \$16,268,636 | 2.50\% | \$ 417,891 | Actual interest rate |
| 6 | Capital Loan 2017 | TD | Third-Party | Fixed Rate | 2-Oct-17 | 10 | \$ 3,569,319 | 2.88\% | \$ 110,097 | Actual interest rate |
| 7 | Capital Loan 2018 | TD | Third-Party | Fixed Rate | 3-Dec-18 | 10 | \$ 3,722,889 | 3.55\% | \$ 139,808 | Actual interest rate |
| 8 | Capital Loan 2019 | TD | Third-Party | Fixed Rate | 3-Sep-19 | 10 | \$ 4,882,764 | 2.37\% | \$ 122,086 | Actual interest rate |
| 9 | Capital Loan 2020 | TD | Third-Party | Fixed Rate | 15-Sep-20 | 10 | \$ 1,488,437 | 1.56\% | \$ 23,220 | Actual interest rate, average principal |
|  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  | \$37,914,549 | 2.76\% | \$ 1,046,797 |  |


| Row | Description | Lender | Affiliated or Third-Party Debt? | Fixed or VariableRate? | Start Date | Term (years) | Principal <br> (\$) | Rate (\%) (Note 2) |  | erest (\$) <br> Note 1) | Additional Comments, if any |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Smart Meter Loan | Infrastructure Ontario | Third-Party | Fixed Rate | 15-Apr-11 | 10 | \$ 24,416 | 3.88\% | \$ | 947 | Actual interest rate, average principal |
| 2 | Capital Loan 2014 | TD | Third-Party | Fixed Rate | 2-Oct-14 | 10 | \$ 1,489,758 | 3.10\% | \$ | 46,108 | Actual interest rate, average principal |
| 3 | Capital Loan 2015 | TD | Third-Party | Fixed Rate | 15-Oct-15 | 10 | \$ 2,805,796 | 2.45\% | \$ | 68,742 | Actual interest rate, average principal |
| 4 | Capital Loan 2016 | TD | Third-Party | Fixed Rate | 30-Nov-16 | 10 | \$ 2,875,847 | 2.36\% | \$ | 67,870 | Actual interest rate, average principal |
| 5 | Replacement loan (CNB) | TD | Third-Party | Fixed Rate | 1-Nov-16 | 10 | \$15,884,080 | 2.50\% | \$ | 397,102 | Actual interest rate, average principal |
| 6 | Capital Loan 2017 | TD | Third-Party | Fixed Rate | 2-Oct-17 | 10 | \$ 3,350,660 | 2.88\% | \$ | 96,499 | Actual interest rate, average principal |
| 7 | Capital Loan 2018 | TD | Third-Party | Fixed Rate | 3-Dec-18 | 10 | \$ 3,536,310 | 3.55\% | \$ | 125,539 | Actual interest rate, average principal |
| 8 | Capital Loan 2019 | TD | Third-Party | Fixed Rate | 3-Sep-19 | 10 | \$ 4,650,886 | 2.37\% | \$ | 110,226 | Actual interest rate, average principal |
| 9 | Capital Loan 2020 | TD | Third-Party | Fixed Rate | 15-Sep-20 | 10 | \$ 5,604,744 | 1.56\% | \$ | 87,434 | Actual interest rate, average principal |
| 10 | Capital Loan 2021 | TD | Third-Party | Fixed Rate | 30-Jun-15 | 10 | \$ 516,667 | 2.06\% | \$ | 10,643 | Actual interest rate, average principal |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  | \$40,739,163 | 2.48\% |  | ,011,110 |  |

### 2.5.2.2 NOTIONAL DEBT

NBHDL's deemed and actual long-term debt are different. For the 2021 Test year, the actual amount of long-term and short-term debt is $\$ 44,046,579$ (Table 5-1) and the deemed long-term debt is $\$ 45,736,492$ (Table 5-2). Therefore, NBHDL has positive notional debt of $\$ 1,689,913$. NBHDL is requesting that the notional debt attract the weighted average cost of actual long-term debt rather than the current deemed long-term debt rate issued by the Board.

### 2.5.2.3 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

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

