

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

|    |                                                                 |   |
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1 **Exhibit 5: Cost of Capital and Capital Structure**

2 The purpose of this evidence is to summarize the method and cost of financing capital  
3 requirements for the 2018 Test Year. PUC Distribution adopts the OEB's guidelines for cost of  
4 capital and understands that these rates are final so that no updates will need to be done.

5 **2.5.1 Capital Structure**

6 PUC Distribution has a current deemed capital structure of 56% long term debt with a return of  
7 3.91%, 4% short term debt with a return of 2.07% and 40% equity with a return of 8.98% as  
8 approved in the 2013 cost of service ("COS") rate decision (EB-2012-0162).

9 PUC Distribution has prepared this 2018 COS Application in accordance with the Board's  
10 guidelines provided in the *Report of the Board on Cost of Capital for Ontario's Regulated*  
11 *Utilities* issued on December 11, 2009. For the purposes of preparing this Application, PUC  
12 Distribution has used the cost of capital parameters issued by the Board on November 23, 2017  
13 for 2018 cost of service rate applications.

14 **2.5.2 Cost of Capital (Return on Equity and Cost of Debt)**

15 As outlined above, for the purposes of preparing this Application PUC Distribution has used the  
16 cost of capital parameters issued by the Board on November 23, 2017 for 2018 COS rate  
17 applications which reflects a return on equity of 9.00%

18 *Cost of Debt: Short Term*

19 For the purposes of preparing this Application, PUC Distribution has used the cost of capital  
20 parameters issued by the Board on November 23, 2017 for 2018 COS rate applications which  
21 reflects a deemed short term debt rate of 2.29%.

22 *Cost of Debt: Long Term*

23 PUC Distribution is requesting a return on long term debt for the 2018 Test Year of 4.12%. This  
24 rate of return represents the weighted average cost of long term debt for the following long term  
25 debt instruments.

1 PUC Distribution has a note payable to the parent company, PUC Inc., for \$26,534,040 with  
2 interest payable at quarterly rates periodically negotiated and principal payable one year after  
3 demand. In this application, the interest rate on this note will be based on the Board's cost of  
4 capital parameter for long term debt for 2018 cost of service rate applications issued November  
5 23, 2017 which is 4.16%.

6 PUC Distribution has 3 loans payable to Ontario Infrastructure Projects Corporation (OIPC):

7 Loan payable #1 to OIPC is an amount of \$5,000,000. It is a 15 year debenture with a fixed  
8 interest rate of 3.82%. The loan is payable semi-annual principal and interest. Security is in the  
9 form of a second ranking general security agreement. This was used to finance the smart meter  
10 project.

11 Loan payable #2 to OIPC was used for the construction of the new integrated service  
12 centre/office building. The total amount of the approved loan principal is \$21,180,000. The loan  
13 is payable over 25 years with interest payable monthly at a fixed interest rate and principal,  
14 secured by a mortgage on the land and building and a general security agreement. The fixed  
15 interest rate on this loan is 4.61% will be determined once the project is completed.

16 Loan payable #3 to OIPC is an amount of \$15,000,000. It is a 25 year debenture with a fixed  
17 interest rate of 3.47%. Security is in the form of a fourth ranking general security agreement and  
18 a guarantee and assignment of shares from the company's shareholder, PUC Inc. The proceeds  
19 of this loan were used for distribution infrastructure replacement.

## 20 *Capital Structure and Cost of Capital*

21 Below is a reproduction of Appendix 2-OA that demonstrates the elements of the capital  
22 structure and cost of capital from 2013 Board-approved and 2018 Test Year. For 2018, the  
23 weighted average cost of capital of 6.00% will be applied to the rate base of \$99,603,703, which  
24 is explained in detail in Exhibit 2, to determine a return on rate base of \$5,975,027 that is  
25 included in the proposed revenue requirement.

**Appendix 2-OA  
Capital Structure and Cost of Capital**

This table must be completed for the last Board-approved year and the test year.

Year: 2013

| Line No.      | Particulars         | Capitalization Ratio |                     | Cost Rate    | Return             |
|---------------|---------------------|----------------------|---------------------|--------------|--------------------|
|               |                     | (%)                  | (\$)                | (%)          | (\$)               |
| <b>Debt</b>   |                     |                      |                     |              |                    |
| 1             | Long-term Debt      | 56.00%               | \$50,686,521        | 3.91%        | \$1,981,843        |
| 2             | Short-term Debt     | 4.00% (1)            | \$3,620,466         | 2.07%        | \$74,944           |
| 3             | <b>Total Debt</b>   | <b>60.0%</b>         | <b>\$54,306,987</b> | <b>3.79%</b> | <b>\$2,056,787</b> |
| <b>Equity</b> |                     |                      |                     |              |                    |
| 4             | Common Equity       | 40.00%               | \$36,204,658        | 8.98%        | \$3,251,178        |
| 5             | Preferred Shares    |                      | \$ -                |              | \$ -               |
| 6             | <b>Total Equity</b> | <b>40.0%</b>         | <b>\$36,204,658</b> | <b>8.98%</b> | <b>\$3,251,178</b> |
| 7             | <b>Total</b>        | <b>100.0%</b>        | <b>\$90,511,645</b> | <b>5.86%</b> | <b>\$5,307,965</b> |

**Appendix 2-OA  
Capital Structure and Cost of Capital**

This table must be completed for the last Board-approved year and the test year.

Year: 2018

| Line No.      | Particulars         | Capitalization Ratio |                     | Cost Rate    | Return             |
|---------------|---------------------|----------------------|---------------------|--------------|--------------------|
|               |                     | (%)                  | (\$)                | (%)          | (\$)               |
| <b>Debt</b>   |                     |                      |                     |              |                    |
| 1             | Long-term Debt      | 56.00%               | \$55,778,074        | 4.12%        | \$2,298,057        |
| 2             | Short-term Debt     | 4.00% (1)            | \$3,984,148         | 2.29%        | \$91,237           |
| 3             | <b>Total Debt</b>   | <b>60.0%</b>         | <b>\$59,762,222</b> | <b>4.00%</b> | <b>\$2,389,294</b> |
| <b>Equity</b> |                     |                      |                     |              |                    |
| 4             | Common Equity       | 40.00%               | \$39,841,481        | 9.00%        | \$3,585,733        |
| 5             | Preferred Shares    |                      | \$ -                |              | \$ -               |
| 6             | <b>Total Equity</b> | <b>40.0%</b>         | <b>\$39,841,481</b> | <b>9.00%</b> | <b>\$3,585,733</b> |
| 7             | <b>Total</b>        | <b>100.0%</b>        | <b>\$99,603,703</b> | <b>6.00%</b> | <b>\$5,975,027</b> |

1 *Weighted Average Cost of Long-Term Debt*

2

3 Outlined below is a reproduction of Appendix 2-OB listing PUC Distribution's long term debt

4 instruments and weighted average cost of long term debt from 2013 to the 2018 test year.

**Appendix 2-OB**  
**Debt Instruments**

This table must be completed for all required historical years, the bridge year and the test year.

Year 2013

| Row   | Description     | Lender                 | Affiliated or Third-Party Debt? | Fixed or Variable-Rate? | Start Date | Term (years) | Principal (\$)   | Rate (%) <sup>2</sup> | Interest (\$) <sup>1</sup> | Additional Comments, if any |
|-------|-----------------|------------------------|---------------------------------|-------------------------|------------|--------------|------------------|-----------------------|----------------------------|-----------------------------|
| 4     | Promissory Note | PUC Inc.               | Affiliated                      | Fixed Rate              | 2013       | No Term      | \$ 26,534,040.00 | 6.10%                 | \$ 1,618,576.44            |                             |
| 5     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2013       | 15           | \$ 5,000,000.00  | 3.82%                 | \$ 191,000.00              |                             |
| 6     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2013       | 25           | \$ 21,180,000.00 | 4.61%                 | \$ 976,398.00              |                             |
|       |                 |                        |                                 |                         |            |              |                  |                       |                            |                             |
| Total |                 |                        |                                 |                         |            |              | \$ 52,714,040    | 5.29%                 | \$ 2,785,974.44            |                             |

Year 2014

| Row   | Description     | Lender                 | Affiliated or Third-Party Debt? | Fixed or Variable-Rate? | Start Date | Term (years) | Principal (\$)   | Rate (%) <sup>2</sup> | Interest (\$) <sup>1</sup> | Additional Comments, if any |
|-------|-----------------|------------------------|---------------------------------|-------------------------|------------|--------------|------------------|-----------------------|----------------------------|-----------------------------|
| 1     | Promissory Note | PUC Inc.               | Affiliated                      | Fixed Rate              | 2014       | No Term      | \$ 26,534,040.00 | 6.10%                 | \$ 1,618,576.44            |                             |
| 2     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2014       | 15           | \$ 5,000,000.00  | 3.82%                 | \$ 191,000.00              |                             |
| 3     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2014       | 25           | \$ 21,180,000.00 | 4.61%                 | \$ 976,398.00              |                             |
| 4     | Promissory Note | Infrastructure Ontario | Third-Party                     | Variable Rate           | 2014       | No Term      | \$ 15,000,000.00 | 1.84%                 | \$ 276,000.00              |                             |
|       |                 |                        |                                 |                         |            |              |                  |                       |                            |                             |
| Total |                 |                        |                                 |                         |            |              | \$ 67,714,040    | 4.52%                 | \$ 3,061,974.44            |                             |

Year 2015

| Row   | Description     | Lender                 | Affiliated or Third-Party Debt? | Fixed or Variable-Rate? | Start Date | Term (years) | Principal (\$)   | Rate (%) <sup>2</sup> | Interest (\$) <sup>1</sup> | Additional Comments, if any |
|-------|-----------------|------------------------|---------------------------------|-------------------------|------------|--------------|------------------|-----------------------|----------------------------|-----------------------------|
| 1     | Promissory Note | PUC Inc.               | Affiliated                      | Fixed Rate              | 2015       | No Term      | \$ 26,534,040.00 | 6.10%                 | \$ 1,618,576.44            |                             |
| 2     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2015       | 15           | \$ 5,000,000.00  | 3.82%                 | \$ 191,000.00              |                             |
| 3     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2015       | 25           | \$ 21,180,000.00 | 4.61%                 | \$ 976,398.00              |                             |
| 4     | Promissory Note | Infrastructure Ontario | Third-Party                     | Variable Rate           | 2015       | No Term      | \$ 15,000,000.00 | 1.55%                 | \$ 232,500.00              |                             |
|       |                 |                        |                                 |                         |            |              |                  |                       |                            |                             |
| Total |                 |                        |                                 |                         |            |              | \$ 67,714,040    | 4.46%                 | \$ 3,018,474.44            |                             |

Year 2016

| Row   | Description     | Lender                 | Affiliated or Third-Party Debt? | Fixed or Variable-Rate? | Start Date | Term (years) | Principal (\$)   | Rate (%) <sup>2</sup> | Interest (\$) <sup>1</sup> | Additional Comments, if any |
|-------|-----------------|------------------------|---------------------------------|-------------------------|------------|--------------|------------------|-----------------------|----------------------------|-----------------------------|
| 1     | Promissory Note | PUC Inc.               | Affiliated                      | Fixed Rate              | 2016       | No Term      | \$ 26,534,040.00 | 6.10%                 | \$ 1,618,576.44            |                             |
| 2     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2016       | 15           | \$ 5,000,000.00  | 3.82%                 | \$ 191,000.00              |                             |
| 3     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2016       | 25           | \$ 21,180,000.00 | 4.61%                 | \$ 976,398.00              |                             |
| 4     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2016       | No Term      | \$ 15,000,000.00 | 1.55%                 | \$ 232,500.00              |                             |
|       |                 |                        |                                 |                         |            |              |                  |                       |                            |                             |
| Total |                 |                        |                                 |                         |            |              | \$ 67,714,040    | 4.46%                 | \$ 3,018,474.44            |                             |

Year 2017

| Row   | Description     | Lender                 | Affiliated or Third-Party Debt? | Fixed or Variable-Rate? | Start Date | Term (years) | Principal (\$)   | Rate (%) <sup>2</sup> | Interest (\$) <sup>1</sup> | Additional Comments, if any |
|-------|-----------------|------------------------|---------------------------------|-------------------------|------------|--------------|------------------|-----------------------|----------------------------|-----------------------------|
| 1     | Promissory Note | PUC Inc.               | Affiliated                      | Fixed Rate              | 2017       | No Term      | \$ 26,534,040.00 | 6.10%                 | \$ 1,618,576.44            |                             |
| 2     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2017       | 15           | \$ 5,000,000.00  | 3.82%                 | \$ 191,000.00              |                             |
| 3     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2017       | 25           | \$ 21,180,000.00 | 4.61%                 | \$ 976,398.00              |                             |
| 4     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2017       | 25           | \$ 15,000,000.00 | 3.47%                 | \$ 520,500.00              |                             |
|       |                 |                        |                                 |                         |            |              |                  |                       |                            |                             |
| Total |                 |                        |                                 |                         |            |              | \$ 67,714,040    | 4.88%                 | \$ 3,306,474.44            |                             |

Year 2018

| Row   | Description     | Lender                 | Affiliated or Third-Party Debt? | Fixed or Variable-Rate? | Start Date | Term (years) | Principal (\$)   | Rate (%) <sup>2</sup> | Interest (\$) <sup>1</sup> | Additional Comments, if any |
|-------|-----------------|------------------------|---------------------------------|-------------------------|------------|--------------|------------------|-----------------------|----------------------------|-----------------------------|
| 1     | Promissory Note | PUC Inc.               | Affiliated                      | Fixed Rate              | 2018       | No Term      | \$ 26,534,040.00 | 4.16%                 | \$ 1,103,816.06            |                             |
| 2     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2018       | 15           | \$ 5,000,000.00  | 3.82%                 | \$ 191,000.00              |                             |
| 3     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2018       | 25           | \$ 21,180,000.00 | 4.61%                 | \$ 976,398.00              |                             |
| 4     | Promissory Note | Infrastructure Ontario | Third-Party                     | Fixed Rate              | 2018       | 25           | \$ 15,000,000.00 | 3.47%                 | \$ 520,500.00              |                             |
|       |                 |                        |                                 |                         |            |              |                  |                       |                            |                             |
| Total |                 |                        |                                 |                         |            |              | \$ 67,714,040    | 4.12%                 | \$ 2,791,714.06            |                             |

1 *Profit or Loss on Redemption of Debt or Preferred Shares*

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

3 *Notional Debt*

4 Notional debt is that portion of the deemed debt capitalization that results from differences  
5 between the distributor's actual debt and the deemed debt thickness of 60% (56% long-term debt  
6 and 4% short-term debt). PUC Distribution has about (\$7.9) million in notional debt in the test  
7 year (i.e. deemed debt portion of rate base of \$59.8 million minus actual debt of \$67.7 million).  
8 PUC Distribution's plan is to reduce debt to equity to the deemed 60/40% before its next  
9 rebasing in 2023.

10 **2.5.3 Not-for-Profit Corporations**

11 PUC Distribution is a for-profit corporation. As a result, the filing requirements associated with  
12 not-for-profit corporations are not applicable.



**APPENDIX 1**

**Promissory Note**

## PROMISSORY NOTE

ISSUED TO: PUC INC. (the "Holder")  
ISSUED BY: PUC DISTRIBUTION INC (the "Borrower")  
AMOUNT: \$30,290,000.00 (the "Principal")

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### 1.0 PROMISE TO PAY

- 1.1 In consideration of the redemption by the Borrower of 3,029 Special Shares, the Borrower hereby promises to pay to the Holder at 765 Queen Street East, Sault Ste. Marie, Ontario the Principal in lawful money of Canada in the manner hereinafter provided, together with interest and other moneys which may from time to time be owing hereunder or pursuant hereto.

### 2.0 PRINCIPAL PAYMENTS

- 2.1 On demand the issuer shall pay to the Holder the balance of Principal, interest and all other monies which may be owing hereunder.

### 3.0 INTEREST

- 3.1 This note shall bear interest at the rate of 10% per annum calculated from December 1<sup>st</sup>, 2001. The first interest payment shall be due on the 31<sup>st</sup> day of December 2001 and thereafter interest shall be payable quarterly on the last day of March, June, September and December. Notwithstanding the foregoing, the interest rate may be adjusted on a quarterly basis by mutual agreement between the Borrower and the Holder. The Borrower agrees that in the absence of manifest error, the record kept by the Holder on this Note of such changes in the interest rate shall be conclusive evidence of the matters recorded.
- 3.2 Interest shall also be calculated and payable on overdue interest from time to time outstanding at the rate in effect at the date of default.

### 4.0 DEFAULT

- 4.1 In the event of default, the full unpaid balance of the Principal and all accrued and unpaid interest thereon shall at the option of the Holder forthwith become due and payable.

5.0 PREPAYMENTS

5.1 The Borrower may, at any time, prepay the outstanding aggregate Principal amount of this Note whether in whole or in part without notice, bonus or penalty.

6.0 WAIVER

6.1 Presentment for payment, demand, protest, notice of protest and notice of dishonour of this Note are hereby waived.

7.0 SUCCESSORS AND ASSIGNS

7.1 The Holder shall not assign any interest in this Note without the prior written consent of the Borrower, which consent shall not be unreasonably withheld or delayed. This Note shall be binding upon the Borrower and its successors and assigns and shall enure to the benefit of the Holder and successors and permitted assigns.

8.0 GOVERNING LAW

8.1 The Note shall be governed and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.

9.0 COLLECTION COSTS

9.1 To the extent permitted by applicable law, the Borrower agrees to pay all costs of collection including, without limitation, reasonable solicitor's fees, disbursements and expenses on a solicitor and his own client basis incurred by the Holder in connection with the enforcement of this Note.

10.0 TIME OF ESSENCE

10.1 Time is of the essence.

11.0 INTERPRETATION

11.1 The division of this Note into sections and insertion of the headings in this Note are for convenience of reference only and shall not affect the construction or interpretation of this Note.



NOTICE

TO: PUC DISTRIBUTION INC.  
765 Queen Street East  
Sault Ste. Marie, Ontario  
P6A 6P2

Re: Exercise of Option – Promissory Note dated December 1<sup>st</sup>, 2001 (the "Note")  
between PUC Distribution Inc. (the "Borrower") and PUC Inc. (the "Holder") in the  
principal amount of Thirty Million Two Hundred and Ninety Thousand Dollars  
\$30,290,000.00 (the "Principal")

TAKE NOTICE that pursuant to paragraph 1.2 of the Note the Holder hereby exercises its option to convert the sum of Three Million Seven Hundred and Fifty Five Thousand Nine Hundred and Sixty Dollars (\$3,755,960.00) of the Principal into One Thousand Six Hundred and Twelve (1,612) Common Shares in the capital stock of the Borrower, effective December 31<sup>st</sup>, 2008. Upon issuance of the Shares the Principal of the Note shall be Twenty Six Million and Five Hundred and Thirty Four Thousand and Forty Dollars (\$26,534,040).

DATED this 18<sup>th</sup> day of December, 2008.

PUC INC.

Per:

  
\_\_\_\_\_  
Brian Curran - President

Per:

  
\_\_\_\_\_  
Terry Greco - Treasurer

We have authority to bind the Corporation

**PUC DISTRIBUTION INC. RESOLUTION**

Agenda Item # 5.2 Date: December 18, 2008

Moved by: LARRY GUERRIERO

Seconded by: RICK WING

**Resolution:**

"RESOLVED that pursuant to the Notice from PUC Inc. dated December 18<sup>th</sup>, 2008 delivered to the Corporation and produced to the Board of Directors wherein PUC Inc. exercised its option to convert the principal amount of the Promissory Note between the Corporation as Borrower and PUC Inc. as Holder dated August 15<sup>th</sup>, 2001 in the amount of \$11,650,000.00 into 5,000 common shares in the capital stock of the Corporation at the rate of \$2,330.00 per share. The Corporation is hereby authorized to issue to PUC Inc. as at December 31<sup>st</sup>, 2008, 5000 Common Shares in the capital stock of the Corporation as fully paid and non-assessable and the President of the Corporation is hereby authorized to deliver certificates for such Shares to PUC Inc. or in accordance with its direction.

BE IT FURTHER RESOLVED that pursuant to the Notice from PUC Inc. delivered to the Corporation and produced to the Board of Directors wherein PUC Inc. exercised its option to convert the sum of \$3,755,960.00 of the principal of the Promissory Note between the Corporation as Borrower and PUC Inc. as Holder dated December 1<sup>st</sup>, 2001 in the amount of \$30,290,000.00 into 1,612 common shares in the capital stock of the Corporation at the rate of \$2,330.00 per share. The Corporation is hereby authorized to issue to PUC Inc. as at December 31<sup>st</sup>, 2008, 1,612 common shares in the capital stock of the Corporation as fully paid and non-assessable and the President of the Corporation is hereby authorized to deliver certificates for such Shares to PUC Inc. or in accordance with its direction."

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|                                   |                                   |                                                         |
|-----------------------------------|-----------------------------------|---------------------------------------------------------|
| <input type="checkbox"/> Carried  | <input type="checkbox"/> Defeated | <input type="checkbox"/> Deferred                       |
| <input type="checkbox"/> Referred | <input type="checkbox"/> Amended  | <input type="checkbox"/> Officially Read Not Dealt With |

  
Chair

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**Action**

|                                    |                                       |                                |
|------------------------------------|---------------------------------------|--------------------------------|
| <input type="checkbox"/> Chair     | <input type="checkbox"/> PUC Inc.     | <input type="checkbox"/> _____ |
| <input type="checkbox"/> President | <input type="checkbox"/> PUC Telecom  | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Secretary | <input type="checkbox"/> PUC Services | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Treasurer | <input type="checkbox"/> PUC Energies | <input type="checkbox"/> _____ |