

## COST OF CAPITAL SUMMARY

1. This evidence, in the following tables 1 through 6, shows a summary of EGD's cost of capital for each of the 2013 Board Approved, and 2014 through 2018 Fiscal Year forecasts.

Table 1  
Cost of Capital Summary

Line No.	2013 Board Approved (excluding CIS)				
	Principal (\$millions)	Component %	Cost Rate %	Return %	Return (\$millions)
1. Long-term debt	2,461.9	60.17%	5.80%	3.490%	142.8
2. Short-term debt	56.7	1.39%	2.00%	0.028%	1.1
3. Preferred shares	100.0	2.44%	3.20%	0.078%	3.2
4. Common equity	1,472.9	36.00%	8.93%	3.215%	131.5
5. Total	<u>4,091.5</u>	<u>100.00%</u>		<u>6.811%</u>	<u>278.6</u>

Table 2  
Cost of Capital Summary

Line No.	2014 Forecast (excluding CIS)				
	Principal (\$millions)	Component %	Cost Rate %	Return %	Return (\$millions)
1. Long-term debt	2,596.9	59.37%	5.57%	3.307%	144.6
2. Short-term debt	102.3	2.34%	1.78%	0.042%	1.8
3. Preferred shares	100.0	2.29%	2.96%	0.068%	2.9
4. Common equity	1,574.6	36.00%	9.27%	3.337%	145.9
5. Total	<u>4,373.8</u>	<u>100.00%</u>		<u>6.754%</u>	<u>295.2</u>

Witness: K. Culbert

Table 3  
Cost of Capital Summary

Line No.	2015 Fiscal Year (excluding CIS)				
	Principal (\$millions)	Component %	Cost Rate %	Return %	Return (\$millions)
1. Long-term debt	2,918.4	61.41%	5.39%	3.310%	157.3
2. Short-term debt	23.2	0.49%	2.75%	0.013%	0.6
3. Preferred shares	100.0	2.10%	3.68%	0.077%	3.7
4. Common equity	1,710.9	36.00%	9.72%	3.499%	166.3
5. Total	4,752.5	100.00%		6.899%	327.9

Table 4  
Cost of Capital Summary

Line No.	2016 Fiscal Year (excluding CIS)				
	Principal (\$millions)	Component %	Cost Rate %	Return %	Return (\$millions)
1. Long-term debt	3,367.0	61.31%	5.33%	3.268%	179.5
2. Short-term debt	47.9	0.87%	3.35%	0.029%	1.6
3. Preferred shares	100.0	1.82%	4.32%	0.079%	4.3
4. Common equity	1,977.1	36.00%	10.12%	3.643%	200.1
5. Total	5,492.0	100.00%		7.019%	385.5

Table 5  
Cost of Capital Summary

Line No.	2017 Fiscal Year (excluding CIS)				
	Principal (\$millions)	Component %	Cost Rate %	Return %	Return (\$millions)
1. Long-term debt	3,515.5	61.49%	5.31%	3.265%	186.7
2. Short-term debt	43.3	0.76%	4.30%	0.033%	1.9
3. Preferred shares	100.0	1.75%	4.64%	0.081%	4.6
4. Common equity	2,058.1	36.00%	10.17%	3.661%	209.3
5. Total	5,716.9	100.00%		7.040%	402.5

Witness: K. Culbert

Table 6  
Cost of Capital Summary

Line No.	2018 Fiscal Year (excluding CIS)				Return (\$millions)
	Principal (\$millions)	Component %	Cost Rate %	Return %	
1. Long-term debt	3,614.9	61.28%	5.36%	3.285%	193.9
2. Short-term debt	60.5	1.02%	4.30%	0.044%	2.6
3. Preferred shares	100.0	1.70%	4.64%	0.079%	4.7
4. Common equity	2,123.7	36.00%	10.27%	3.697%	218.2
5. Total	<u>5,899.1</u>	<u>100.00%</u>		<u>7.105%</u>	<u>419.4</u>

2. Details of the forecast debt issuances for each of the fiscal years 2014 through 2018, including forecast cost rates and debt issuance costs are included in Exhibit E1, Tab 2, Schedules 1 and 2. Evidence with respect to the return on equity included within the Allowed Revenue and revenue deficiency calculation is found in evidence at Exhibit E2, Tab 1, Schedules 1 and 2.
3. Further details of each of the elements of the capital structure and the determination of the cost of capital overall and any resulting deficiency or sufficiency in earnings are found at Exhibits E3, E4, E5, E6, & E7, Tab 1, Schedules 1, 2, 3, 4, & 5.

Witness: K. Culbert

### COST OF CAPITAL – 2014 to 2016

1. The purpose of this evidence is to provide an update of the financing activity, the method and cost of financing capital requirements and the cost of short-term debt for 2014 to 2016.
2. For evidence outlining the cost of equity, please see Exhibit E2, Tab 1, Schedule 1.

#### 2014 (Forecast Year) Financing Update

3. The Company plans to issue \$430 million of debt, the details of which can be found in Table 1. The Company has \$200 million of term debt maturing in each of January and September 2014.

Table 1

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	215	15-Sep-14	10	2.61%	1.20%	3.81%	0.05%	3.86%
2	215	15-Sep-14	30	2.96%	1.50%	4.46%	0.02%	4.48%

4. A capital contribution of \$100 million will be required to maintain deemed equity of 36%.
5. There are no preferred share issuances planned for the 2014 Forecast Year.

#### 2015 (Forecast Year) Financing Update

6. The Company plans to issue \$550 million of debt, the details of which can be found in Table 2. The Company does not have any term debt maturities in 2015.

Table 2

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	130	15-Jun-15	10	2.90%	1.40%	4.30%	0.05%	4.35%
2	145	15-Oct-15	10	3.60%	1.40%	5.00%	0.05%	5.05%
3	275	15-Oct-15	30	3.43%	1.70%	5.13%	0.02%	5.15%

7. A capital contribution of \$150 million will be required to maintain deemed equity of 36%.

8. There are no preferred share issuances planned for the 2015 Forecast Year.

2016 (Forecast Year) Financing Update

9. The Company plans to issue \$162 million of debt, the details of which can be found in Table 3. The Company does not have any term debt maturities in 2016.

Table 3

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	162	15-Sep-16	10	3.10%	1.50%	4.60%	0.05%	4.65%

10. A capital contribution of \$50 million will be required to maintain deemed equity of 36%.

11. There are no preferred share issuances planned for the 2016 Forecast Year.

Cost of Short-Term Debt

12. EGD currently maintains a \$700 million, committed credit facility provided by a syndicate of Canadian banks. In addition to committing to the availability of the

Witness: P. Bhatia

\$700 million credit facility, the banks also commit to a fixed pricing level (fixed spread over the relevant floating rate for the underlying cost of funds) for a period of 364-days; assuming that EGD adheres to the terms and conditions of the committed credit agreement.

13. The Canadian banks' commitments allow for the \$700 million, committed credit facilities to be used to backstop EGD's \$700 million commercial paper program. The Canadian commercial paper ("CP") market targets investors who purchase Canadian Bankers' Acceptance deposit notes ("BA"). To access the CP market, an issuing company must maintain a commercial paper public rating(s) from DBRS, Moody's Investor Service or Standard & Poor's. Currently, EGD's CP program is rated R-1 (low) with a stable outlook by DBRS; and A-1 (low) by Standard & Poor's.
14. The BA market is largely priced using the Canadian Deposit Offer Rate ("CDOR") as the underlying cost of funds with a risk-adjusted, company-specific spread charged in addition to the relevant CDOR. The CP market provides the most cost effective financing of short-term borrowing requirements. Assuming the maintenance of EGD's current, public CP ratings, the following outlines the Company's anticipated assumed short-term borrowing costs:

Per Annum Interest Rate	2014	2015	2016
Short Term Debt Rate	1.78%	2.75%	3.35%

15. The Company's CP program is largely used to finance short-term gas storage requirements.

16. The existing \$700 million commercial paper program and \$700 million credit facility in place to backstop the commercial paper program are anticipated to adequately accommodate the peak gas storage cycle.
17. In the maintenance of the \$700 million committed credit facility, the Company is charged an annual \$50,000 administration fee. In addition, the Company is charged a 0.20% standby fee on any undrawn balance of the committed credit facility; as well as, an annual 0.05% fee to extend the maturity date of the committed credit facilities for an additional 364 days. The administration, extension and standby fees are estimated at \$1.8 million annually. These fees are amortized over a 2-year term. The Company is also charged approximately \$170,000 per annum to maintain its credit ratings with DBRS and Standard & Poor's. The combined credit facility, credit rating agency and MTN Base Shelf Prospectus re-filing fees total approximately \$6.0 million for the 2014, 2015 and 2016 Forecast Years.
18. To provide financing flexibility during construction of GTA project, the Company will consider enhancing its liquidity. These liquidity enhancing actions may include the potential increase in existing credit facility, issuing short term notes or other potential alternatives.

#### Cost of Long-Term Debt

19. EGD uses long-term debt to finance maintenance capital and expansion capital expenditure requirements; as well as, to re-finance existing long-term debt issuances that are maturing. To support the Company's long-term debt financing requirements, EGD maintains a Short Form Base Shelf Prospectus ("MTN Prospectus") that allows for the cumulative issuance of up to \$800 million of

medium term notes into the Canadian debt capital market. The MTN Prospectus expires in January 2015, at which time it will be renewed.

20. The Canadian medium term note ("MTN") market is targeted to the Canadian retail and institutional investor looking for medium to long-term, fixed income investment alternatives. To access the MTN market, issuers must maintain a public debt rating(s) issues by DBRS, Moody's Investor Service or Standard & Poor's. Currently, EGD's MTN program is rated A with a stable outlook by DBRS; and A- with a stable outlook by Standard & Poor's.
21. The MTN market is largely priced using the relevant Government of Canada bond rate ("GoC") as the underlying cost of funds with a risk-adjusted, company-specific spread charged in addition to the relevant GoC. Assuming the maintenance of EGD's current, public MTN ratings, the following outlines the Company's anticipated assumed long-term borrowing costs:

Per Annum Interest Rate	2014	2015	2016
Long Term Debt Rate	4.17%	4.93%	4.65%

22. As set out in Exhibit A2, Tab 3, Schedule 1, an information update will be provided outlining forecast financing costs and debt rate for 2017 and 2018.



COST OF CAPITAL – 2017 and 2018

1. The purpose of this evidence is to provide an update of the financing activity, the method and cost of financing capital requirements and the cost of short-term debt for 2017 and 2018. As explained at Exhibit A2, Tab 3, Schedule 1, Enbridge's cost of debt rates and fixed financing costs for 2017 and 2018 are being set in this proceeding, and will not be subject to future adjustment. The cost of debt for 2017 and 2018 will be set within the first phase of the 2017 Rate Adjustment proceeding, by applying the cost of debt rates fixed in this proceeding to an updated forecast of Enbridge's debt for 2017 and 2018. The cost of debt rates for 2017 and 2018 can be seen at Exhibit F1, Tab 1, Schedule 3, Appendix A, page 2, cColumns 3 and 7. The fixed financing costs for 2017 and 2018 can be seen at Exhibit F1, Tab 1, Schedule 3, Appendix A, page 1, Line 7. The following evidence sets out how the Company has determined the forecast cost of debt and fixed financing costs for 2017 and 2018.
2. For evidence outlining the cost of equity, please see Exhibit E2, Tab 1, Schedule 2.

2017 (Forecast Year) Financing Update

3. The Company plans to issue \$250 million of debt, the details of which can be found in Table 1. The Company has \$200 million of term debt maturing in December 2017.

Table 1

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	250	15-Nov-17	10	4.30%	1.50%	5.80%	0.05%	5.85%

Witnesses: P. Bhatia  
S. Kancharla

4. A capital contribution of \$50 million will be required to maintain deemed equity of 36%.
5. There are no preferred share issuances planned for the 2017 Forecast Year.

#### 2018 (Forecast Year) Financing Update

6. The Company plans to issue \$65 million of debt, the details of which can be found in Table 2. The Company does not have any term debt maturities in 2018.

Table 2

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	65	15-Jan-18	10	4.30%	1.50%	5.80%	0.08%	5.88%

7. A capital contribution of \$60 million will be required to maintain deemed equity of 36%.
8. There are no preferred share issuances planned for the 2018 Forecast Year.

#### Cost of Short-Term Debt

9. EGD currently maintains a \$700 million, committed credit facility provided by a syndicate of Canadian banks. In addition to committing to the availability of the \$700 million credit facility, the banks also commit to a fixed pricing level (fixed spread over the relevant floating rate for the underlying cost of funds) for a period of 364-days; assuming that EGD adheres to the terms and conditions of the committed credit agreement.

Witnesses: P. Bhatia  
S. Kancharla

10. The Canadian banks' commitments allow for the \$700 million, committed credit facilities to be used to backstop EGD's \$700 million commercial paper program. The Canadian commercial paper ("CP") market targets investors who purchase Canadian Bankers' Acceptance deposit notes ("BA"). To access the CP market, an issuing company must maintain a commercial paper public rating(s) from DBRS, Moody's Investor Service or Standard & Poor's. Currently, EGD's CP program is rated R-1 (low) with a stable outlook by DBRS; and A-1 (low) by Standard & Poor's.
11. The BA market is largely priced using the Canadian Deposit Offer Rate ("CDOR") as the underlying cost of funds with a risk-adjusted, company-specific spread charged in addition to the relevant CDOR. The CP market provides the most cost effective financing of short-term borrowing requirements. Assuming the maintenance of EGD's current, public CP ratings, the following outlines the Company's anticipated assumed short-term borrowing costs:

Per Annum Interest Rate	2017	2018
Short Term Debt Rate	4.30%	4.30%

12. The Company's CP program is largely used to finance short-term gas storage requirements.
13. The existing \$700 million commercial paper program and \$700 million credit facility in place to backstop the commercial paper program are anticipated to adequately accommodate the peak gas storage cycle.
14. In the maintenance of the \$700 million committed credit facility, the Company is charged an annual \$50,000 administration fee. In addition, the Company is

Witnesses: P. Bhatia  
S. Kancharla

charged a 0.22% standby fee on any undrawn balance of the committed credit facility; as well as, an annual 0.05% fee to extend the maturity date of the committed credit facilities for an additional 364 days. The administration, extension and standby fees are estimated at \$1.8 million annually. These fees are amortized over a 2-year term. The Company is also charged approximately \$180,000 per annum to maintain its credit ratings with DBRS and Standard & Poor's. The combined credit facility, credit rating agency and MTN Base Shelf Prospectus re-filing fees total approximately \$4.0 million for the 2017 and 2018 Forecast Years.

#### Cost of Long-Term Debt

15. EGD uses long-term debt to finance maintenance capital and expansion capital expenditure requirements; as well as, to re-finance existing long-term debt issuances that are maturing. To support the Company's long-term debt financing requirements, EGD maintains a Short Form Base Shelf Prospectus ("MTN Prospectus") that allows for the cumulative issuance of up to \$800 million of medium term notes into the Canadian debt capital market. The MTN Prospectus expires in January 2015, at which time it will be renewed.
16. The Canadian medium term note ("MTN") market is targeted to the Canadian retail and institutional investor looking for medium to long-term, fixed income investment alternatives. To access the MTN market, issuers must maintain a public debt rating(s) issues by DBRS, Moody's Investor Service or Standard & Poor's. Currently, EGD's MTN program is rated A with a stable outlook by DBRS; and A- with a stable outlook by Standard & Poor's.
17. The MTN market is largely priced using the relevant Government of Canada bond rate ("GoC") as the underlying cost of funds with a risk-adjusted, company-specific

Witnesses: P. Bhatia  
S. Kancharla

spread charged in addition to the relevant GoC. Assuming the maintenance of EGD's current, public MTN ratings, the following outlines the Company's anticipated assumed long-term borrowing costs:

Per Annum Interest Rate	2017	2018
Long Term Debt Rate	5.80%	5.80%

Witnesses: P. Bhatia  
S. Kancharla

## RETURN ON EQUITY CALCULATIONS FOR 2014 THROUGH 2016

1. The purpose of this submission is to present evidence that supports the proposal to set the Return on Equity (ROE) level for each of 2014, 2015, and 2016 at 9.27%, 9.72%, and 10.12%, respectively. A forecast for each of 2017 and 2018 will be provided in an information update shortly.
2. As outlined in the overview for this Application at Exhibit A2, Tab 1, Schedule 1, the Company is applying to set Allowed Revenue amounts for each year of the three-year period from 2014 through 2016. The Allowed Revenue amounts will be built up based on forecasts of costs, inclusive of productivity. One of these costs is the Cost of Capital. Details of the treatment of Cost of Capital are found at Exhibit A2, Tab 5, Schedule 1.
3. The Company affirms at Exhibit A2, Tab 5, Schedule 1 that the equity ratio will be held constant at the 2013 Board-approved 36% (EB-2011-0354).

### ROE Formula

4. In the Board's 2009 Report on the Cost of Capital for Ontario's Regulated Utilities issued December 2009, it reiterated its preference for the formula-based equity risk premium ("ERP") approach. It also reset parameters of its formula to accommodate changing economic and financial conditions since the last formula established in 2006<sup>1</sup>. The Board's Report in the following formula is used to determine the appropriate Return on Equity:

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<sup>1</sup> Report of the Board on Cost of Capital and 2<sup>nd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors, issued December 20, 2006

Witnesses: P. Bhatia  
M. Lister  
M. Suarez

$$ROE_t = 9.75\% + [0.5 \times (LCBF_t - 4.25\%)] + [0.5 \times (UBS_t - 1.415\%)]$$

Where:

- LCBF is the Long Canada Bond Forecast determined as the average 3-month out and 1-year out yields of the 10-year Government of Canada (GoC) Bond Yield Forecasts (as sourced from Consensus Economics) plus the actual spread of the 30-year over the 10-year GoC (as published by the Bank of Canada) in the month of analysis.
- UBS is the A-rated Utility Bond Yield Spread between the Canada 30-year Utility bond index yield (as reported by Bloomberg L.P.) and the 30-year GoC (as published by the Bank of Canada) in the month of analysis.
- 9.75% is the Base ROE,
- 4.25% is the Base LCBF, and
- 1.415% is the Base UBS.

5. The forecasts for each of these elements are shown below.

<b>Table 1</b>		
<b>Year</b>	<b>Long Canada Bond Yields</b>	<b>Utility Bond &amp; 30-yr GoC Spreads</b>
2014	3.20%	1.50%
2015	3.90%	1.70%
2016	4.60%	1.80%
<i>Source: Enbridge Inc., March 2013</i>		

6. The Long Canada Bond Yield forecast is a consensus representing projections from seven financial institutions as of February 2013. Utility spreads are derived from mean reversion models that support the expectation of long term spreads reverting back to an equilibrium level.

7. Using the forecast parameters in Table 1, the ROE is calculated as follows:

Witnesses: P. Bhatia  
M. Lister  
M. Suarez

$$\begin{aligned} 2014 \text{ ROE} &= 9.75\% + [0.5 \times (\text{LCBF}_t - 4.25\%)] + [0.5 \times (\text{UBS}_t - 1.415\%)] \\ &= 9.75\% + [0.5 \times (3.20\% - 4.25\%)] + [0.5 \times (1.50\% - 1.415\%)] \\ &= 9.75\% + [0.5 \times (-1.05\%)] + [0.5 \times (0.085\%)] \\ &= 9.75\% - 0.525\% + 0.0425\% \\ &= 9.2675\% \text{ or } 9.27\% \end{aligned}$$

$$\begin{aligned} 2015 \text{ ROE} &= 9.75\% + [0.5 \times (\text{LCBF}_t - 4.25\%)] + [0.5 \times (\text{UBS}_t - 1.415\%)] \\ &= 9.75\% + [0.5 \times (3.90\% - 4.25\%)] + [0.5 \times (1.70\% - 1.415\%)] \\ &= 9.75\% + [0.5 \times (-0.35\%)] + [0.5 \times (0.285\%)] \\ &= 9.75\% - 0.175\% + 0.1425\% \\ &= 9.7175\% \text{ or } 9.72\% \end{aligned}$$

$$\begin{aligned} 2016 \text{ ROE} &= 9.75\% + [0.5 \times (\text{LCBF}_t - 4.25\%)] + [0.5 \times (\text{UBS}_t - 1.415\%)] \\ &= 9.75\% + [0.5 \times (4.60\% - 4.25\%)] + [0.5 \times (1.80\% - 1.415\%)] \\ &= 9.75\% + [0.5 \times (0.35\%)] + [0.5 \times (0.385\%)] \\ &= 9.75\% + 0.175\% + 0.1925\% \\ &= 10.1175\% \text{ or } 10.12\% \end{aligned}$$

Witnesses: P. Bhatia  
M. Lister  
M. Suarez



RETURN ON EQUITY CALCULATIONS FOR 2017 AND 2018

1. The purpose of this submission is to present evidence that supports the proposal to set the Return on Equity (“ROE”) level for 2017 and 2018 at 10.17% and 10.27%, respectively.
2. As explained at Exhibit A2, Tab 3, Schedule 1, the ROE levels for 2017 and 2018 will be set in this 2014 proceeding and will not be subject to future adjustment.
3. This evidence provides the baseline ROE forecasts for 2017 and 2018 using the ROE Formula described at Exhibit E2, Tab 1, Schedule 1.

ROE Formula

4. From the Board’s 2009 Report on the Cost of Capital for Ontario’s Regulated Utilities issued December 2009, the following formula is in effect:

$$ROE_t = 9.75\% + [0.5 \times (LCBF_t - 4.25\%)] + [0.5 \times (UBS_t - 1.415\%)]$$

Where:

- ROE is set in the month that is three months in advance of the effective date for rate implementation.
- LCBF is the Long Canada Bond Forecast determined as the average 3-month out and 1-year out yields of the 10-year Government of Canada (“GoC”) Bond Yield Forecasts (as sourced from Consensus Economics) plus the actual spread of the 30-year over the 10-year GoC (as published by the Bank of Canada) in the month of analysis.
- UBS is the A-rated Utility Bond Yield Spread between the Canada 30-year Utility bond index yield (as reported by Bloomberg L.P.) and the 30-year GoC (as published by the Bank of Canada) in the month of analysis.
- 9.75% is the Base ROE,
- 4.25% is the Base LCFB, and
- 1.415% is the Base UBS.

Witnesses: P. Bhatia  
M. Suarez

COST OF CAPITAL – 2017 and 2018

1. The purpose of this evidence is to provide an update of the financing activity, the method and cost of financing capital requirements and the cost of short-term debt for 2017 and 2018. As explained at Exhibit A2, Tab 3, Schedule 1, Enbridge's cost of debt rates and fixed financing costs for 2017 and 2018 are being set in this proceeding, and will not be subject to future adjustment. The cost of debt for 2017 and 2018 will be set within the first phase of the 2017 Rate Adjustment proceeding, by applying the cost of debt rates fixed in this proceeding to an updated forecast of Enbridge's debt for 2017 and 2018. The cost of debt rates for 2017 and 2018 can be seen at Exhibit F1, Tab 1, Schedule 3, Appendix A, page 2, cColumns 3 and 7. The fixed financing costs for 2017 and 2018 can be seen at Exhibit F1, Tab 1, Schedule 3, Appendix A, page 1, Line 7. The following evidence sets out how the Company has determined the forecast cost of debt and fixed financing costs for 2017 and 2018.
2. For evidence outlining the cost of equity, please see Exhibit E2, Tab 1, Schedule 2.

2017 (Forecast Year) Financing Update

3. The Company plans to issue \$250 million of debt, the details of which can be found in Table 1. The Company has \$200 million of term debt maturing in December 2017.

Table 1

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	250	15-Nov-17	10	4.30%	1.50%	5.80%	0.05%	5.85%

Witnesses: P. Bhatia  
S. Kancharla

4. A capital contribution of \$50 million will be required to maintain deemed equity of 36%.
5. There are no preferred share issuances planned for the 2017 Forecast Year.

#### 2018 (Forecast Year) Financing Update

6. The Company plans to issue \$65 million of debt, the details of which can be found in Table 2. The Company does not have any term debt maturities in 2018.

Table 2

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	65	15-Jan-18	10	4.30%	1.50%	5.80%	0.08%	5.88%

7. A capital contribution of \$60 million will be required to maintain deemed equity of 36%.
8. There are no preferred share issuances planned for the 2018 Forecast Year.

#### Cost of Short-Term Debt

9. EGD currently maintains a \$700 million, committed credit facility provided by a syndicate of Canadian banks. In addition to committing to the availability of the \$700 million credit facility, the banks also commit to a fixed pricing level (fixed spread over the relevant floating rate for the underlying cost of funds) for a period of 364-days; assuming that EGD adheres to the terms and conditions of the committed credit agreement.

Witnesses: P. Bhatia  
S. Kancharla

10. The Canadian banks' commitments allow for the \$700 million, committed credit facilities to be used to backstop EGD's \$700 million commercial paper program. The Canadian commercial paper ("CP") market targets investors who purchase Canadian Bankers' Acceptance deposit notes ("BA"). To access the CP market, an issuing company must maintain a commercial paper public rating(s) from DBRS, Moody's Investor Service or Standard & Poor's. Currently, EGD's CP program is rated R-1 (low) with a stable outlook by DBRS; and A-1 (low) by Standard & Poor's.
11. The BA market is largely priced using the Canadian Deposit Offer Rate ("CDOR") as the underlying cost of funds with a risk-adjusted, company-specific spread charged in addition to the relevant CDOR. The CP market provides the most cost effective financing of short-term borrowing requirements. Assuming the maintenance of EGD's current, public CP ratings, the following outlines the Company's anticipated assumed short-term borrowing costs:

Per Annum Interest Rate	2017	2018
Short Term Debt Rate	4.30%	4.30%

12. The Company's CP program is largely used to finance short-term gas storage requirements.
13. The existing \$700 million commercial paper program and \$700 million credit facility in place to backstop the commercial paper program are anticipated to adequately accommodate the peak gas storage cycle.
14. In the maintenance of the \$700 million committed credit facility, the Company is charged an annual \$50,000 administration fee. In addition, the Company is

Witnesses: P. Bhatia  
S. Kancharla

charged a 0.22% standby fee on any undrawn balance of the committed credit facility; as well as, an annual 0.05% fee to extend the maturity date of the committed credit facilities for an additional 364 days. The administration, extension and standby fees are estimated at \$1.8 million annually. These fees are amortized over a 2-year term. The Company is also charged approximately \$180,000 per annum to maintain its credit ratings with DBRS and Standard & Poor's. The combined credit facility, credit rating agency and MTN Base Shelf Prospectus re-filing fees total approximately \$4.0 million for the 2017 and 2018 Forecast Years.

#### Cost of Long-Term Debt

15. EGD uses long-term debt to finance maintenance capital and expansion capital expenditure requirements; as well as, to re-finance existing long-term debt issuances that are maturing. To support the Company's long-term debt financing requirements, EGD maintains a Short Form Base Shelf Prospectus ("MTN Prospectus") that allows for the cumulative issuance of up to \$800 million of medium term notes into the Canadian debt capital market. The MTN Prospectus expires in January 2015, at which time it will be renewed.
16. The Canadian medium term note ("MTN") market is targeted to the Canadian retail and institutional investor looking for medium to long-term, fixed income investment alternatives. To access the MTN market, issuers must maintain a public debt rating(s) issues by DBRS, Moody's Investor Service or Standard & Poor's. Currently, EGD's MTN program is rated A with a stable outlook by DBRS; and A- with a stable outlook by Standard & Poor's.
17. The MTN market is largely priced using the relevant Government of Canada bond rate ("GoC") as the underlying cost of funds with a risk-adjusted, company-specific

Witnesses: P. Bhatia  
S. Kancharla

spread charged in addition to the relevant GoC. Assuming the maintenance of EGD's current, public MTN ratings, the following outlines the Company's anticipated assumed long-term borrowing costs:

Per Annum Interest Rate	2017	2018
Long Term Debt Rate	5.80%	5.80%

Witnesses: P. Bhatia  
S. Kancharla

5. For the five-year period in question, it is not possible to adhere to the timing set forth in the Board's ROE formula. As a result, it was necessary for the Company to rely on forecasts for LCBF and UBS as generated by Enbridge Inc.'s Treasury department for each of the years in question. The forecasts are shown in Table 1.

<b>Table 1</b>		
<b>Year</b>	<b>Long Canada Bond Yields</b>	<b>Utility Bond &amp; 30-yr GoC Spreads</b>
2014	3.20%	1.50%
2015	3.90%	1.70%
2016	4.60%	1.80%
2017	4.80%	1.70%
2018	5.00%	1.70%
<i>Source: Enbridge Inc., March 2013</i>		

6. The Long Canada Bond Yield forecast is a consensus representing projections from seven financial institutions as of February 2013. Utility spreads are derived from mean reversion models that support the expectation of long term spreads reverting back to an equilibrium level.
7. Using the forecast parameters in Table 1, the ROE for 2017 and 2018 are calculated thus:

$$\begin{aligned}
 \text{2017 ROE} &= 9.75\% + [0.5 \times (\text{LCBF}_t - 4.25\%)] + [0.5 \times (\text{UBS}_t - 1.415\%)] \\
 &= 9.75\% + [0.5 \times (4.80\% - 4.25\%)] + [0.5 \times (1.70\% - 1.415\%)] \\
 &= 9.75\% + [0.5 \times (0.55\%)] + [0.5 \times (0.285\%)] \\
 &= 9.75\% + 0.275\% + 0.1425\% \\
 &= 10.1675\% \text{ or } 10.17\%
 \end{aligned}$$

$$\begin{aligned} 2018 \text{ ROE} &= 9.75\% + [0.5 \times (\text{LCBF}_t - 4.25\%)] + [0.5 \times (\text{UBS}_t - 1.415\%)] \\ &= 9.75\% + [0.5 \times (5.00\% - 4.25\%)] + [0.5 \times (1.70\% - 1.415\%)] \\ &= 9.75\% + [0.5 \times (0.75\%)] + [0.5 \times (0.285\%)] \\ &= 9.75\% + 0.375\% + 0.1425\% \\ &= 10.2675\% \text{ or } 10.27\% \end{aligned}$$



COST OF CAPITAL  
2014 FISCAL YEAR

	Col. 1	Col. 2	Col. 3	Col. 4
Line No.	Principal Excl. CC/CIS (\$Millions)	Component %	Cost Rate %	Return Component %
1. Long and Medium-Term Debt	2,596.9	59.37	5.57	3.307
2. Short-Term Debt	102.3	2.34	1.78	0.042
3.	2,699.2	61.71		3.349
4. Preference Shares	100.0	2.29	2.96	0.068
5. Common Equity	1,574.6	36.00	9.27	3.337
6.	4,373.8	100.00		6.754
7. Rate Base	(\$Millions)			4,373.8
8. Utility Income	(\$Millions)			321.2
9. Indicated Rate of Return				7.344
10. Sufficiency in Rate of Return				0.590
11. Net Sufficiency	(\$Millions)			25.8
12. Gross Sufficiency	(\$Millions)	(other than CC - CIS)		35.1
13. Customer Care/CIS Deficiency	(\$Millions)	(\$114.1 vs \$110.2)		(3.9)
14. Total Gross Revenue Sufficiency	(\$Millions)			31.2
15. Revenue at Existing Rates	(\$Millions)			2,497.9
16. Allowed Revenue	(\$Millions)			2,466.7
17. Gross Revenue Sufficiency	(\$Millions)			31.2
<u>Common Equity</u>				
18. Allowed Rate of Return				9.270
19. Earnings on Common Equity				10.908
20. Sufficiency in Common Equity Return				1.638

Witness: K. Culbert

CALCULATION OF COST RATES  
FOR CAPITAL STRUCTURE COMPONENTS  
2014 FISCAL YEAR

Line No.	Col. 1 Average of Monthly Averages (\$Millions)	Col. 2 Col. 3 Carrying Cost (\$Millions)
<u>Long and Medium-Term Debt</u>		
1. Debt Summary	2,618.4	145.9
2. Unamortized Finance Costs	(21.5)	-
3. (Profit)/Loss on Redemption	-	-
4.	<u>2,596.9</u>	<u>145.9</u>
5. Calculated Cost Rate		<u>5.57%</u>
<u>Short-Term Debt</u>		
6. Calculated Cost Rate		<u>1.78%</u>
<u>Preference Shares</u>		
7. Preference Share Summary	100.0	3.0
8. Unamortized Finance Costs	-	-
9. (Profit)/Loss on Redemption	-	-
10.	<u>100.0</u>	<u>3.0</u>
11. Calculated Cost Rate		<u>2.96%</u>
<u>Common Equity</u>		
12. Board Formula ROE		<u>9.27%</u>

Witness: K. Culbert

SUMMARY STATEMENT OF PRINCIPAL  
AND CARRYING COST OF  
TERM DEBT  
2014 FISCAL YEAR

			Col. 1	Col. 2	Col. 3
Line No.	Coupon Rate	Maturity Date	Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost
			(\$Millions)		(\$Millions)
Medium Term Notes					
1.	8.85%	October 2, 2025	20.0	8.970%	1.8
2.	7.60%	October 29, 2026	100.0	8.086%	8.1
3.	6.65%	November 3, 2027	100.0	6.711%	6.7
4.	6.10%	May 19, 2028	100.0	6.161%	6.2
5.	6.05%	July 5, 2023	100.0	6.383%	6.4
6.	6.90%	November 15, 2032	150.0	6.950%	10.4
7.	6.16%	December 16, 2033	150.0	6.180%	9.3
8.	5.16%	September 24, 2014	141.7	5.610%	7.9
9.	5.21%	February 25, 2036	300.0	5.183%	15.5
10.	4.77%	December 17, 2021	175.0	5.310%	9.3
11.	5.16%	December 4, 2017	200.0	5.220%	10.4
12.	5.57%	January 29, 2014	8.3	5.660%	0.5
13.	4.04%	November 23, 2020	200.0	5.209%	10.4
14.	4.95%	November 22, 2050	200.0	4.990%	10.0
15.	4.95%	November 22, 2050	100.0	4.731%	4.7
16.	4.10%	August 15, 2023	400.0	4.180%	16.7
17.	3.80%	September 15, 2024	56.9	3.850%	2.2
18.	3.90%	September 15, 2024	5.8	3.980%	0.2
19.	4.30%	September 15, 2044	37.9	4.320%	1.6
20.	4.70%	September 15, 2044	24.8	4.720%	1.2
21.			<u>2,570.4</u>		<u>139.5</u>
Long-Term Debentures					
22.	9.85%	December 2, 2024	<u>85.0</u>	9.910%	<u>8.4</u>
23.			<u>85.0</u>		<u>8.4</u>
24.	Removal of separately treated CIS 64% assumed debt of 2014 \$57.8M rate base value		<u>(37.0)</u>	5.350%	<u>(2.0)</u>
25.	Total Term Debt		<u>2,618.4</u>		<u>145.9</u>

Witness: K. Culbert

UNAMORTIZED DEBT DISCOUNT AND EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2014 FISCAL YEAR

		Col. 1
Line No.		Unamortized Debt Discount and Expense
		(\$Millions)
1.	January 1	22.6
2.	January 31	22.3
3.	February	22.0
4.	March	21.7
5.	April	21.4
6.	May	21.0
7.	June	20.7
8.	July	20.4
9.	August	20.1
10.	September	22.2
11.	October	22.0
12.	November	21.7
13.	December	21.4
14.	Average of Monthly Averages	<u>21.5</u>

Witness: K. Culbert

PREFERENCE SHARES  
SUMMARY STATEMENT OF PRINCIPAL  
AND CARRYING COST  
2014 FISCAL YEAR

			Col. 1	Col. 2	Col. 3
Line No.	Coupon Rate	Maturity Date	Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost
			(\$Millions)		(\$Millions)
Fixed/Floating Cumulative Redeemable Convertible					
\$25 Par Value					
1.	N/A	Group 3 Series D	100.0	2.96%	3.0
2.	Total		100.0		3.0

Witness: K. Culbert

UNAMORTIZED PREFERENCE SHARE ISSUE EXPENSE  
 AVERAGE OF MONTHLY AVERAGES  
2014 FISCAL YEAR

Line No.	Col. 1	
	Unamortized Issue Expense	
	(\$Millions)	
1. January 1	-	
2. January 31	-	
3. February	-	
4. March	-	
5. April	-	
6. May	-	
7. June	-	
8. July	-	
9. August	-	
10. September	-	
11. October	-	
12. November	-	
13. December	-	
14. Average of Monthly Averages	-	

Witness: K. Culbert

COST OF CAPITAL  
2015 FORECAST YEAR

	Col. 1	Col. 2	Col. 3	Col. 4
Line No.	Principal Excl. CC/CIS (\$Millions)	Component %	Cost Rate %	Return Component %
1. Long and Medium-Term Debt	2,918.4	61.41	5.39	3.310
2. Short-Term Debt	23.2	0.49	2.75	0.013
3.	2,941.6	61.90		3.323
4. Preference Shares	100.0	2.10	3.68	0.077
5. Common Equity	1,710.9	36.00	9.72	3.499
6.	4,752.5	100.00		6.899
7. Rate Base	(\$Millions)			4,752.5
8. Utility Income	(\$Millions)			312.7
9. Indicated Rate of Return				6.580
10. Deficiency in Rate of Return				(0.319)
11. Net Deficiency	(\$Millions)			(15.2)
12. Gross Deficiency	(\$Millions)	(other than CC - CIS)		(20.6)
13. Customer Care/CIS Deficiency	(\$Millions)	(\$118.7 vs \$110.2)		(8.5)
14. Total Gross Revenue Deficiency	(\$Millions)			(29.1)
15. Revenue at Existing Rates	(\$Millions)			2,635.8
16. Allowed Revenue	(\$Millions)			2,664.9
17. Gross Revenue Deficiency	(\$Millions)			(29.1)
<u>Common Equity</u>				
18. Allowed Rate of Return				9.720
19. Earnings on Common Equity				8.833
20. Deficiency in Common Equity Return				(0.887)

Witness: K. Culbert

CALCULATION OF COST RATES  
FOR CAPITAL STRUCTURE COMPONENTS  
2015 FORECAST YEAR

Line No.		Col. 1 Average of Monthly Averages (\$Millions)	Col. 2	Col. 3 Carrying Cost (\$Millions)
	<u>Long and Medium-Term Debt</u>			
1.	Debt Summary	2,939.0		158.3
2.	Unamortized Finance Costs	(20.6)		-
3.	(Profit)/Loss on Redemption	-		-
4.		<u>2,918.4</u>		<u>158.3</u>
5.	Calculated Cost Rate		<u>5.39%</u>	
	<u>Short-Term Debt</u>			
6.	Calculated Cost Rate		<u>2.75%</u>	
	<u>Preference Shares</u>			
7.	Preference Share Summary	100.0		3.7
8.	Unamortized Finance Costs	-		-
9.	(Profit)/Loss on Redemption	-		-
10.		<u>100.0</u>		<u>3.7</u>
11.	Calculated Cost Rate		<u>3.68%</u>	
	<u>Common Equity</u>			
12.	Board Formula ROE		<u>9.72%</u>	

Witness: K. Culbert



SUMMARY STATEMENT OF PRINCIPAL  
AND CARRYING COST OF  
TERM DEBT  
2015 FORECAST YEAR

Line No.	Coupon Rate	Maturity Date	Col. 1 Average of Monthly Averages Principal (\$Millions)	Col. 2 Effective Cost Rate	Col. 3 Carrying Cost (\$Millions)
Medium Term Notes					
1.	8.85%	October 2, 2025	20.0	8.970%	1.8
2.	7.60%	October 29, 2026	100.0	8.086%	8.1
3.	6.65%	November 3, 2027	100.0	6.711%	6.7
4.	6.10%	May 19, 2028	100.0	6.161%	6.2
5.	6.05%	July 5, 2023	100.0	6.383%	6.4
6.	6.90%	November 15, 2032	150.0	6.950%	10.4
7.	6.16%	December 16, 2033	150.0	6.180%	9.3
8.	5.21%	February 25, 2036	300.0	5.183%	15.5
9.	4.77%	December 17, 2021	175.0	5.310%	9.3
10.	5.16%	December 4, 2017	200.0	5.220%	10.4
11.	4.04%	November 23, 2020	200.0	5.209%	10.4
12.	4.95%	November 22, 2050	200.0	4.990%	10.0
13.	4.95%	November 22, 2050	100.0	4.731%	4.7
14.	4.10%	August 15, 2023	400.0	4.180%	16.7
15.	3.80%	September 15, 2024	195.0	3.850%	7.5
16.	3.90%	September 15, 2024	20.0	3.980%	0.8
17.	4.30%	September 15, 2044	130.0	4.320%	5.6
18.	4.70%	September 15, 2044	85.0	4.720%	4.0
19.	4.30%	June 15, 2025	70.4	4.350%	3.1
20.	5.00%	October 15, 2025	30.2	5.050%	1.5
21.	4.60%	October 15, 2045	27.1	4.620%	1.3
22.	5.60%	October 15, 2045	30.2	5.620%	1.7
23.			<u>2,882.9</u>		<u>151.4</u>
Long-Term Debentures					
24.	9.85%	December 2, 2024	<u>85.0</u>	9.910%	<u>8.4</u>
25.			<u>85.0</u>		<u>8.4</u>
26.	Removal of separately treated CIS 64% assumed debt of 2015 \$45.1M rate base value		<u>(28.9)</u>	5.350%	<u>(1.5)</u>
27.	Total Term Debt		<u><u>2,939.0</u></u>		<u><u>158.3</u></u>

Witness: K. Culbert

UNAMORTIZED DEBT DISCOUNT AND EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2015 FORECAST YEAR

		Col. 1
Line No.		Unamortized Debt Discount and Expense
		(\$Millions)
1.	January 1	21.4
2.	January 31	21.2
3.	February	20.9
4.	March	20.6
5.	April	20.4
6.	May	20.1
7.	June	20.5
8.	July	20.2
9.	August	19.9
10.	September	19.6
11.	October	21.6
12.	November	21.4
13.	December	21.1
14.	Average of Monthly Averages	<u>20.6</u>

PREFERENCE SHARES  
 SUMMARY STATEMENT OF PRINCIPAL  
 AND CARRYING COST  
2015 FORECAST YEAR

			Col. 1	Col. 2	Col. 3
Line No.	Coupon Rate	Maturity Date	Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost
			(\$Millions)		(\$Millions)
Fixed/Floating Cumulative Redeemable Convertible					
\$25 Par Value					
1.	N/A	Group 3 Series D	100.0	3.68%	3.7
2.	Total		100.0		3.7

Witness: K. Culbert

UNAMORTIZED PREFERENCE SHARE ISSUE EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2015 FORECAST YEAR

Line No.	Col. 1	
	Unamortized Issue Expense	
		(\$Millions)
1.	January 1	-
2.	January 31	-
3.	February	-
4.	March	-
5.	April	-
6.	May	-
7.	June	-
8.	July	-
9.	August	-
10.	September	-
11.	October	-
12.	November	-
13.	December	-
14.	Average of Monthly Averages	-

Witness: K. Culbert

COST OF CAPITAL  
2016 FORECAST YEAR

	Col. 1	Col. 2	Col. 3	Col. 4
Line No.	Principal Excl. CC/CIS (\$Millions)	Component %	Cost Rate %	Return Component %
1. Long and Medium-Term Debt	3,367.0	61.31	5.33	3.268
2. Short-Term Debt	47.9	0.87	3.35	0.029
3.	3,414.9	62.18		3.297
4. Preference Shares	100.0	1.82	4.32	0.079
5. Common Equity	1,977.1	36.00	10.12	3.643
6.	5,492.0	100.00		7.019
7. Rate Base	(\$Millions)			5,492.0
8. Utility Income	(\$Millions)			307.3
9. Indicated Rate of Return				5.595
10. Deficiency in Rate of Return				(1.424)
11. Net Deficiency	(\$Millions)			(78.2)
12. Gross Deficiency	(\$Millions)	(other than CC - CIS)		(106.4)
13. Customer Care/CIS Deficiency	(\$Millions)	(\$123.5 vs \$110.2)		(13.3)
14. Total Gross Revenue Deficiency	(\$Millions)			(119.7)
15. Revenue at Existing Rates	(\$Millions)			2,683.4
16. Allowed Revenue	(\$Millions)			2,803.1
17. Gross Revenue Deficiency	(\$Millions)			(119.7)
<u>Common Equity</u>				
18. Allowed Rate of Return				10.120
19. Earnings on Common Equity				6.164
20. Deficiency in Common Equity Return				(3.956)

Witness: K. Culbert

CALCULATION OF COST RATES  
FOR CAPITAL STRUCTURE COMPONENTS  
2016 FORECAST YEAR

Line No.	Col. 1 Average of Monthly Averages (\$Millions)	Col. 2 Col. 3 Carrying Cost (\$Millions)
<u>Long and Medium-Term Debt</u>		
1. Debt Summary	3,386.6	180.4
2. Unamortized Finance Costs	(19.6)	-
3. (Profit)/Loss on Redemption	-	-
4.	<u>3,367.0</u>	<u>180.4</u>
5. Calculated Cost Rate		<u>5.33%</u>
<u>Short-Term Debt</u>		
6. Calculated Cost Rate		<u>3.35%</u>
<u>Preference Shares</u>		
7. Preference Share Summary	100.0	4.3
8. Unamortized Finance Costs	-	-
9. (Profit)/Loss on Redemption	-	-
10.	<u>100.0</u>	<u>4.3</u>
11. Calculated Cost Rate		<u>4.32%</u>
<u>Common Equity</u>		
12. Board Formula ROE		<u>10.12%</u>

Witness: K. Culbert

SUMMARY STATEMENT OF PRINCIPAL  
AND CARRYING COST OF  
TERM DEBT  
2016 FORECAST YEAR

			Col. 1	Col. 2	Col. 3
Line No.	Coupon Rate	Maturity Date	Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost
			(\$Millions)		(\$Millions)
Medium Term Notes					
1.	8.85%	October 2, 2025	20.0	8.970%	1.8
2.	7.60%	October 29, 2026	100.0	8.086%	8.1
3.	6.65%	November 3, 2027	100.0	6.711%	6.7
4.	6.10%	May 19, 2028	100.0	6.161%	6.2
5.	6.05%	July 5, 2023	100.0	6.383%	6.4
6.	6.90%	November 15, 2032	150.0	6.950%	10.4
7.	6.16%	December 16, 2033	150.0	6.180%	9.3
8.	5.21%	February 25, 2036	300.0	5.183%	15.5
9.	4.77%	December 17, 2021	175.0	5.310%	9.3
10.	5.16%	December 4, 2017	200.0	5.220%	10.4
11.	4.04%	November 23, 2020	200.0	5.209%	10.4
12.	4.95%	November 22, 2050	200.0	4.990%	10.0
13.	4.95%	November 22, 2050	100.0	4.731%	4.7
14.	4.10%	August 15, 2023	400.0	4.180%	16.7
15.	3.80%	September 15, 2024	195.0	3.850%	7.5
16.	3.90%	September 15, 2024	20.0	3.980%	0.8
17.	4.30%	September 15, 2044	130.0	4.320%	5.6
18.	4.70%	September 15, 2044	85.0	4.720%	4.0
19.	4.30%	June 15, 2025	130.0	4.350%	5.7
20.	5.00%	October 15, 2025	145.0	5.050%	7.3
21.	4.60%	October 15, 2045	130.0	4.620%	6.0
22.	5.60%	October 15, 2045	145.0	5.620%	8.1
23.	4.60%	September 15, 2026	47.3	4.650%	2.2
24.			3,322.3		173.1
Long-Term Debentures					
25.	9.85%	December 2, 2024	85.0	9.910%	8.4
26.			85.0		8.4
27.	Removal of separately treated CIS 64% assumed debt of 2016 \$32.4M rate base value		(20.7)	5.350%	(1.1)
28.	Total Term Debt		3,386.6		180.4

Witness: K. Culbert

UNAMORTIZED DEBT DISCOUNT AND EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2016 FORECAST YEAR

		Col. 1
Line No.		Unamortized Debt Discount and Expense
		(\$Millions)
1.	January 1	21.1
2.	January 31	20.8
3.	February	20.5
4.	March	20.2
5.	April	19.9
6.	May	19.6
7.	June	19.3
8.	July	19.1
9.	August	18.8
10.	September	19.4
11.	October	19.1
12.	November	18.8
13.	December	18.5
14.	Average of Monthly Averages	<u>19.6</u>



PREFERENCE SHARES  
 SUMMARY STATEMENT OF PRINCIPAL  
 AND CARRYING COST  
2016 FORECAST YEAR

			Col. 1	Col. 2	Col. 3
Line No.	Coupon Rate	Maturity Date	Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost
			(\$Millions)		(\$Millions)
Fixed/Floating Cumulative Redeemable Convertible					
\$25 Par Value					
1.	N/A	Group 3 Series D	100.0	4.32%	4.3
2.	Total		100.0		4.3

Witness: K. Culbert

UNAMORTIZED PREFERENCE SHARE ISSUE EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2016 FORECAST YEAR

Line No.	Col. 1 Unamortized Issue Expense
	(\$Millions)
1. January 1	-
2. January 31	-
3. February	-
4. March	-
5. April	-
6. May	-
7. June	-
8. July	-
9. August	-
10. September	-
11. October	-
12. November	-
13. December	-
14. Average of Monthly Averages	-

Witness: K. Culbert

COST OF CAPITAL  
2017 FORECAST YEAR

	Col. 1	Col. 2	Col. 3	Col. 4
Line No.	Principal Excl. CC/CIS (\$Millions)	Component %	Cost Rate %	Return Component %
1. Long and Medium-Term Debt	3,515.5	61.49	5.31	3.265
2. Short-Term Debt	<u>43.3</u>	<u>0.76</u>	4.30	<u>0.033</u>
3.	3,558.8	62.25		3.298
4. Preference Shares	100.0	1.75	4.64	0.081
5. Common Equity	<u>2,058.1</u>	<u>36.00</u>	10.17	<u>3.661</u>
6.	<u>5,716.9</u>	<u>100.00</u>		<u>7.040</u>
7. Rate Base	(\$Millions)			5,716.9
8. Utility Income	(\$Millions)			293.9
9. Indicated Rate of Return				5.141
10. Deficiency in Rate of Return				(1.899)
11. Net Deficiency	(\$Millions)			(108.6)
12. Gross Deficiency	(\$Millions)	(other than CC - CIS)		(147.7)
13. Customer Care/CIS Deficiency	(\$Millions)	(\$128.6 vs \$110.2)		(18.4)
14. Total Gross Revenue Deficiency	(\$Millions)			(166.1)
15. Revenue at Existing Rates	(\$Millions)			2,693.2
16. Allowed Revenue	(\$Millions)			2,859.3
17. Gross Revenue Deficiency	(\$Millions)			(166.1)
<u>Common Equity</u>				
18. Allowed Rate of Return				10.170
19. Earnings on Common Equity				4.894
20. Deficiency in Common Equity Return				(5.276)

Witness: K. Culbert

CALCULATION OF COST RATES  
FOR CAPITAL STRUCTURE COMPONENTS  
2017 FORECAST YEAR

Line No.	Col. 1 Average of Monthly Averages (\$Millions)	Col. 2 Col. 3 Carrying Cost (\$Millions)
<u>Long and Medium-Term Debt</u>		
1. Debt Summary	3,532.4	187.5
2. Unamortized Finance Costs	(16.9)	-
3. (Profit)/Loss on Redemption	-	-
4.	<u>3,515.5</u>	<u>187.5</u>
5. Calculated Cost Rate		<u>5.31%</u>
<u>Short-Term Debt</u>		
6. Calculated Cost Rate		<u>4.30%</u>
<u>Preference Shares</u>		
7. Preference Share Summary	100.0	4.6
8. Unamortized Finance Costs	-	-
9. (Profit)/Loss on Redemption	-	-
10.	<u>100.0</u>	<u>4.6</u>
11. Calculated Cost Rate		<u>4.64%</u>
<u>Common Equity</u>		
12. Board Formula ROE		<u>10.17%</u>

Witness: K. Culbert

SUMMARY STATEMENT OF PRINCIPAL  
AND CARRYING COST OF  
TERM DEBT  
2017 FORECAST YEAR

			Col. 1	Col. 2	Col. 3
Line No.	Coupon Rate	Maturity Date	Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost
			(\$Millions)		(\$Millions)
Medium Term Notes					
1.	8.85%	October 2, 2025	20.0	8.970%	1.8
2.	7.60%	October 29, 2026	100.0	8.086%	8.1
3.	6.65%	November 3, 2027	100.0	6.711%	6.7
4.	6.10%	May 19, 2028	100.0	6.161%	6.2
5.	6.05%	July 5, 2023	100.0	6.383%	6.4
6.	6.90%	November 15, 2032	150.0	6.950%	10.4
7.	6.16%	December 16, 2033	150.0	6.180%	9.3
8.	5.21%	February 25, 2036	300.0	5.183%	15.5
9.	4.77%	December 17, 2021	175.0	5.310%	9.3
10.	5.16%	December 4, 2017	191.7	5.220%	10.0
11.	4.04%	November 23, 2020	200.0	5.209%	10.4
12.	4.95%	November 22, 2050	200.0	4.990%	10.0
13.	4.95%	November 22, 2050	100.0	4.731%	4.7
14.	4.10%	August 15, 2023	400.0	4.180%	16.7
15.	3.80%	September 15, 2024	195.0	3.850%	7.5
16.	3.90%	September 15, 2024	20.0	3.980%	0.8
17.	4.30%	September 15, 2044	130.0	4.320%	5.6
18.	4.70%	September 15, 2044	85.0	4.720%	4.0
19.	4.30%	June 15, 2025	130.0	4.350%	5.7
20.	5.00%	October 15, 2025	145.0	5.050%	7.3
21.	4.60%	October 15, 2045	130.0	4.620%	6.0
22.	5.60%	October 15, 2045	145.0	5.620%	8.1
23.	4.60%	September 15, 2026	162.0	4.650%	7.5
24.	5.80%	November 15, 2027	31.3	5.850%	1.8
25.			3,460.0		179.8
Long-Term Debentures					
26.	9.85%	December 2, 2024	85.0	9.910%	8.4
27.			85.0		8.4
28.	Removal of separately treated CIS 64% assumed debt of 2017 \$19.7M rate base value		(12.6)	5.350%	(0.7)
29.	Total Term Debt		3,532.4		187.5

Witness: K. Culbert

UNAMORTIZED DEBT DISCOUNT AND EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2017 FORECAST YEAR

		Col. 1
Line No.		Unamortized Debt Discount and Expense
		(\$Millions)
1.	January 1	18.5
2.	January 31	18.2
3.	February	17.9
4.	March	17.6
5.	April	17.3
6.	May	17.1
7.	June	16.8
8.	July	16.5
9.	August	16.2
10.	September	15.9
11.	October	15.6
12.	November	16.5
13.	December	16.2
14.	Average of Monthly Averages	<u>16.9</u>

Witness: K. Culbert

PREFERENCE SHARES  
 SUMMARY STATEMENT OF PRINCIPAL  
 AND CARRYING COST  
2017 FORECAST YEAR

			Col. 1	Col. 2	Col. 3
Line	Coupon		Average of	Effective	Carrying
No.	Rate	Maturity Date	Monthly Averages	Cost Rate	Cost
			Principal		
			(Millions)		(Millions)
Fixed/Floating Cumulative Redeemable Convertible					
\$25 Par Value					
1.	N/A	Group 3 Series D	100.0	4.64%	4.6
2.	Total		100.0		4.6

Witness: K. Culbert

UNAMORTIZED PREFERENCE SHARE ISSUE EXPENSE  
 AVERAGE OF MONTHLY AVERAGES  
2017 FORECAST YEAR

		Col. 1
Line No.		Unamortized Issue Expense
		(\$Millions)
1.	January 1	-
2.	January 31	-
3.	February	-
4.	March	-
5.	April	-
6.	May	-
7.	June	-
8.	July	-
9.	August	-
10.	September	-
11.	October	-
12.	November	-
13.	December	-
14.	Average of Monthly Averages	-

Witness: K. Culbert



COST OF CAPITAL  
2018 FORECAST YEAR

	Col. 1	Col. 2	Col. 3	Col. 4
Line No.	Principal Excl. CC/CIS	Component	Cost Rate	Return Component
	(\$Millions)	%	%	%
1. Long and Medium-Term Debt	3,614.9	61.28	5.36	3.285
2. Short-Term Debt	60.5	1.02	4.30	0.044
3.	3,675.4	62.30		3.329
4. Preference Shares	100.0	1.70	4.64	0.079
5. Common Equity	2,123.7	36.00	10.27	3.697
6.	5,899.1	100.00		7.105
7. Rate Base	(\$Millions)			5,899.1
8. Utility Income	(\$Millions)			277.9
9. Indicated Rate of Return				4.711
10. Deficiency in Rate of Return				(2.394)
11. Net Deficiency	(\$Millions)			(141.2)
12. Gross Deficiency	(\$Millions)	(other than CC - CIS)		(192.1)
13. Customer Care/CIS Deficiency	(\$Millions)	(\$133.8 vs \$110.2)		(23.6)
14. Total Gross Revenue Deficiency	(\$Millions)			(215.7)
15. Revenue at Existing Rates	(\$Millions)			2,703.3
16. Allowed Revenue	(\$Millions)			2,919.0
17. Gross Revenue Deficiency	(\$Millions)			(215.7)
<u>Common Equity</u>				
18. Allowed Rate of Return				10.270
19. Earnings on Common Equity				3.619
20. Deficiency in Common Equity Return				(6.651)

Witness: K. Culbert

CALCULATION OF COST RATES  
FOR CAPITAL STRUCTURE COMPONENTS  
2018 FORECAST YEAR

Line No.	Col. 1 Average of Monthly Averages (\$Millions)	Col. 2 Col. 3 Carrying Cost (\$Millions)
<u>Long and Medium-Term Debt</u>		
1. Debt Summary	3,629.8	194.5
2. Unamortized Finance Costs	(14.9)	-
3. (Profit)/Loss on Redemption	-	-
4.	<u>3,614.9</u>	<u>194.5</u>
5. Calculated Cost Rate		<u>5.36%</u>
<u>Short-Term Debt</u>		
6. Calculated Cost Rate		<u>4.30%</u>
<u>Preference Shares</u>		
7. Preference Share Summary	100.0	4.6
8. Unamortized Finance Costs	-	-
9. (Profit)/Loss on Redemption	-	-
10.	<u>100.0</u>	<u>4.6</u>
11. Calculated Cost Rate		<u>4.64%</u>
<u>Common Equity</u>		
12. Board Formula ROE		<u>10.27%</u>

Witness: K. Culbert

SUMMARY STATEMENT OF PRINCIPAL  
AND CARRYING COST OF  
TERM DEBT  
2018 FORECAST YEAR

		Col. 1	Col. 2	Col. 3	
Line No.	Coupon Rate	Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost	
		(\$Millions)		(\$Millions)	
Medium Term Notes					
1.	8.85%	October 2, 2025	20.0	8.970%	1.8
2.	7.60%	October 29, 2026	100.0	8.086%	8.1
3.	6.65%	November 3, 2027	100.0	6.711%	6.7
4.	6.10%	May 19, 2028	100.0	6.161%	6.2
5.	6.05%	July 5, 2023	100.0	6.383%	6.4
6.	6.90%	November 15, 2032	150.0	6.950%	10.4
7.	6.16%	December 16, 2033	150.0	6.180%	9.3
8.	5.21%	February 25, 2036	300.0	5.183%	15.5
9.	4.77%	December 17, 2021	175.0	5.310%	9.3
10.	4.04%	November 23, 2020	200.0	5.209%	10.4
11.	4.95%	November 22, 2050	200.0	4.990%	10.0
12.	4.95%	November 22, 2050	100.0	4.731%	4.7
13.	4.10%	August 15, 2023	400.0	4.180%	16.7
14.	3.80%	September 15, 2024	195.0	3.850%	7.5
15.	3.90%	September 15, 2024	20.0	3.980%	0.8
16.	4.30%	September 15, 2044	130.0	4.320%	5.6
17.	4.70%	September 15, 2044	85.0	4.720%	4.0
18.	4.30%	June 15, 2025	130.0	4.350%	5.7
19.	5.00%	October 15, 2025	145.0	5.050%	7.3
20.	4.60%	October 15, 2045	130.0	4.620%	6.0
21.	5.60%	October 15, 2045	145.0	5.620%	8.1
22.	4.60%	September 15, 2026	162.0	4.650%	7.5
23.	5.80%	November 15, 2027	250.0	5.850%	14.6
24.	5.80%	January 15, 2028	62.3	5.880%	3.7
25.			3,549.3		186.3
Long-Term Debentures					
26.	9.85%	December 2, 2024	85.0	9.910%	8.4
27.			85.0		8.4
28.	Removal of separately treated CIS 64% assumed debt of 2018 \$7.0M rate base value		(4.5)	5.350%	(0.2)
29.	Total Term Debt		3,629.8		194.5

Witness: K. Culbert

UNAMORTIZED DEBT DISCOUNT AND EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2018 FORECAST YEAR

		Col. 1
Line No.		Unamortized Debt Discount and Expense
		(\$Millions)
1.	January 1	16.2
2.	January 31	16.4
3.	February	16.1
4.	March	15.8
5.	April	15.5
6.	May	15.2
7.	June	14.9
8.	July	14.6
9.	August	14.3
10.	September	14.0
11.	October	13.7
12.	November	13.4
13.	December	13.1
14.	Average of Monthly Averages	<u>14.9</u>

Witness: K. Culbert

PREFERENCE SHARES  
 SUMMARY STATEMENT OF PRINCIPAL  
 AND CARRYING COST  
2018 FORECAST YEAR

			Col. 1	Col. 2	Col. 3
Line No.	Coupon Rate	Maturity Date	Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost
			(\$Millions)		(\$Millions)
Fixed/Floating Cumulative Redeemable Convertible \$25 Par Value					
1.	N/A	Group 3 Series D	<u>100.0</u>	4.64%	<u>4.6</u>
2.	Total		<u>100.0</u>		<u>4.6</u>

Witness: K. Culbert

UNAMORTIZED PREFERENCE SHARE ISSUE EXPENSE  
 AVERAGE OF MONTHLY AVERAGES  
2018 FORECAST YEAR

		Col. 1
Line No.		Unamortized Issue Expense
		(\$Millions)
1.	January 1	-
2.	January 31	-
3.	February	-
4.	March	-
5.	April	-
6.	May	-
7.	June	-
8.	July	-
9.	August	-
10.	September	-
11.	October	-
12.	November	-
13.	December	-
14.	Average of Monthly Averages	-

Witness: K. Culbert