Board Staff Interrogatory #014

Ref: Ex. C1-T1-S2, pages 9-10
Hydro One Networks Inc. Decision with Reasons, EB-2008-0272, pages 51, 54-55
Hydro One Remote Communities Decision with Reasons, EB-2008-0232, page 12
London Hydro Inc. Decision with Reasons, EB-2008-0235, pages 36-37

Issue Number: 3.2
Issue: Are OPG's proposed costs for its long-term and short-term debt components of its capital structure appropriate?

Interrogatory

In the first reference, OPG states:

Consistent with the methodology approved in EB-2007-0905, OPG has used a provision for long-term debt to reconcile the debt component of OPG's regulated capital structure with the proposed rate base that financing supports. OPG's other long-term debt provision is determined based on:

- The difference between the debt resulting from the application of OPG's proposed capital structure to its proposed regulated rate base.
- The project-related and corporate long-term debt assigned or allocated to OPG's regulated operations as discussed above.
- The portion of short-term debt allocated to regulated operations. This calculation is described in Ex. C1-T1-S3.

a) Please confirm whether OPG's definition of "Other Long-Term Debt Provision" is the same as that of "notional debt" as used in the Hydro One Network's Inc. transmission, Hydro One Remote Communities Inc., and London Hydro Inc. rate applications cited in the references noted above. Please explain your answer.

b) In view of the Board's decisions in the cited electricity transmitter and distributor rate applications, where the Board determined that notional debt should attract the actual or embedded weighted average cost of debt if available, and would only attract the deemed debt rate if the utility had no actual debt, please provide OPG's reasons for proposing that the unfunded portion of debt capitalization should attract the deemed debt rate rather than OPG's forecasted weighted average cost of debt for each of the 2011 and 2012 test years.

Response

a) OPG has reviewed the references cited above. At page 51 of EB-2008-0272, the issue of "what cost should be applied to the portion of long-term debt which exceeds actual embedded debt" is identified. OPG's Other Long-Term Debt Provision is the portion of long-term debt which exceeds actual embedded debt plus forecast new debt issues during the bridge and test period, less debt retired during the bridge and test period. The other Decisions cited by Board Staff do not discuss the definition of notional debt.

OPG accepts that its “Other Long-Term Debt Provision” is the same as “notional debt” given that there is “no actual debt” underlying that component of the OEB-approved capital structure.

b) The decisions cited by in the preamble to this interrogatory were issued prior to the OEB’s Cost of Capital Report. OPG understands these precedents to have been superseded by OEB’s findings on deemed debt contained in the Cost of Capital Report.

The Cost of Capital Report (page 54) provides for the use of the deemed debt rate where a utility has no actual debt. OPG understands this to mean that if there is no actual debt underlying a component of the capital structure, then the deemed long-term debt rate should apply. OPG developed its application consistent with this understanding of the deemed debt rate methodology in the Cost of Capital Report.

Board Staff Interrogatory #015

Ref: Ex. C1-T1-S2, page 10

Issue Number: 3.2
Issue: Are OPG's proposed costs for its long-term and short-term debt components of its capital structure appropriate?

Interrogatory

In the reference, OPG states that:

> As discussed in Ex C1-T1-S1, OPG has used the cost of capital methodology contained in the Report of the Board on the Cost of Capital for Ontario's Regulated Utilities in EB-2009-0084 ("Cost of Capital Report"). OPG's other long-term debt provision is consistent with the definition used by the OEB to describe the deemed debt component of the approved capital structure for electricity distributors. Page 54 of the Cost of Capital Report states that "the deemed long-term debt rate will be used where an electricity distribution utility has no actual debt".

Exhibit C1/T2/S2/Table 6 shows Existing and Planned Long-Term debt for the Calendar Year ending December 31, 2011. Similarly, Exhibit C1/T2/S2/Table 7 shows Existing and Planned Long-Term Debt for the Calendar Year ending December 31, 2012.

a) Given that Tables 6 and 7 of Exhibit C1/T2/S2 show that OPG will have actual or embedded debt during the test year period, please explain how OPG's proposed use of the deemed long-term debt rate is consistent with the quoted guideline from page 54 of the Cost of Capital Report.

b) Please provide versions of Exhibit C1/T1/S1/Table 1 and C1/T1/S1/Table 2 using the weighted average cost of Existing/Planned Long-Term Debt (the Cost Rate in Line 2 of each table) for each of 2011 and 2012 as the Cost Rate for the Other Long-Term Debt Provision in Line 3 of each table for the same year.

Response

a) See response to Ex. L-01-014.

b) Versions of Ex. C1-T1-S1, Tables 1 and 2 using a weighted average cost of existing/ planned debt approach for line 3 are provided below.

Table 1
Capitalization and Cost of Capital
Summary of Capitalization and Cost of Capital ($M)
Calendar Year Ending December 31, 2012

Line No.	Capitalization	Principal ($M)	Component (%)	Cost Rate (%)	Cost of Capital ($M)
		(a)	(b)	(c)	(d)
	Capitalization and Return on Capital:				
1	Short-term Debt	189.5	2.9	4.13	10.4
2	Existing/Planned Long-Term Debt	2,502.8	38.8	5.50	137.6
3	Other Long-Term Debt Provision	725.2	11.2	5.50	39.9
4	Total Debt	3,417.5	53.0	5.50	187.9
5	Common Equity	3,030.6	47.0	9.85	298.5
6	Rate Base Financed by Capital Structure	6,448.1	81.2	7.54	486.5
7	Adjustment for Lesser of UNL or ARC	1,490.1	18.8	5.58	83.1
8	Rate Base	7,938.2	100.0	7.17	569.6

Notes: Other than row 3, column (c) footnotes in Ex. C1-T1-S1, Table 1 apply

Table 2
Capitalization and Cost of Capital
Summary of Capitalization and Cost of Capital ($M)
Calendar Year Ending December 31, 2011

Line No.	Capitalization	Principal ($M)	Component (%)	Cost Rate (%)	Cost of Capital ($M)
		(a)	(b)	(c)	(d)
	Capitalization and Return on Capital:				
1	Short-term Debt	189.5	3.0	2.64	7.6
2	Existing/Planned Long-Term Debt	2,283.1	36.1	5.53	126.2
3	Other Long-Term Debt Provision	877.7	13.9	5.53	48.5
4	Total Debt	3,350.3	53.0	5.44	182.3
5	Common Equity	2,971.1	47.0	9.85	292.7
6	Rate Base Financed by Capital Structure	6,321.4	80.6	7.51	474.9
7	Adjustment for Lesser of UNL or ARC	1,523.3	19.4	5.58	85.0
8	Rate Base	7,844.7	100.0	7.14	559.9

Notes: Other than row 3, column (c) footnotes in Ex. C1-T1-S1, Table 2 apply

Board Staff Interrogatory #016

Ref: Ex. C1-T1-S3, pages 2-3

Issue Number: 3.2
Issue: Are OPG's proposed costs for its long-term and short-term debt components of its capital structure appropriate?

Interrogatory

On page 2 of this exhibit, OPG states that it has used "the Global Insight forecast as the basis for the bankers' acceptances interest rate forecast after adjusting for the spread differential between bankers' acceptances and the yield on treasury securities. For 2010 the bankers' acceptances rate used is 0.46%, for 2011 it is 1.79% and for 2012 it is 3.28%."

a) Please provide the source document or data of the Global Insight forecast used and the derivation of the bankers' acceptance rate forecasts documented in the evidence.

b) Is the reference bankers' acceptance rate used based on one-month or a three-month bankers' acceptances' or a combination thereof? Please explain your response in detail.

c) Please explain the reasons for the expected increase in the bankers' acceptance rates, specifically,

i) Please explain the reason for the increases in 2011 and 2012.
ii) What domestic or international economic phenomena are expected to drive the increases in the rates?
iii) What evidence in 2010 is there that the rates are increasing in the direction and magnitude forecasted?

Response

a) and b)

The Global Insight forecast used to derive the bankers' acceptance rate forecast is contained in Attachment 1 which is an extract from their December, 2009 Canadian Forecast Summary.

The bankers' acceptance rate forecast consists of the Global Insight forecast for the 3-Month T-Bill Rate shown at the top line of the fifth block of figures of page 8 of Attachment 1 plus a historical spread of bankers' acceptance over T-Bills of approximately 20 basis points.

c) i) The increase in the bankers' acceptance rate in 2011 and 2012 arises from Global Insight's forecast of rates in these periods.

ii) Global Insight states in its forecast that it expects a strong recovery in the Canadian economy in 2010 and expects the Bank of Canada to begin raising rates toward the end of 2010. Rate increases are expected to continue into future periods “since rates cannot stay at low levels as the economy heats up”.

iii) The Bank of Canada increased the overnight lending rate by 0.25 per cent in each of June and July 2010 to the current rate of 0.75 per cent.

Filed: 2010-08-12
EB-2010-0008
L-1-016
Attachment 1

CANADIAN FORECAST SUMMARY

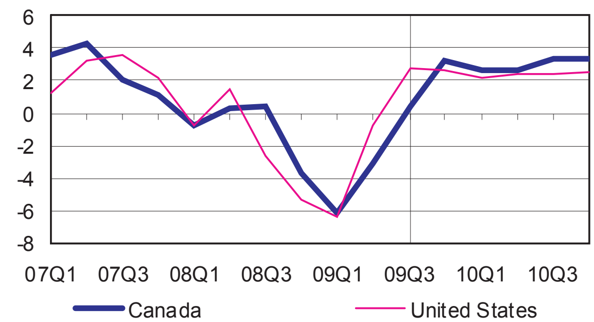
DECEMBER 2009

Canadian Short-Term Economic Outlook

Recession Over in Canada, Strong Recovery in 2010

The recession in Canada officially ended in the third quarter of this year, as real GDP grew at a very soft 0.4% annualized rate from the previous quarter. There were slight growth revisions to the previous quarter's GDP results. First-quarter output fell at a 6.2% annualized rate (previously down 6.1%), and second-quarter economic output declined at a 3.1% annualized rate (previously down 3.4%). In our November forecast update, we were expecting a slight 0.1% annualized increase, which was not far off the previous months' forecasts—they were around 0.5%. Canada's third-quarter results also pale in comparison with the 2.8% annualized rate advance in U.S. real GDP for the same quarter. Overall, the recovery of the Canadian economy is unfolding as we expected. Just like the outlook for the United States, we expect growth in the fourth quarter to be relatively healthy close to 3%.

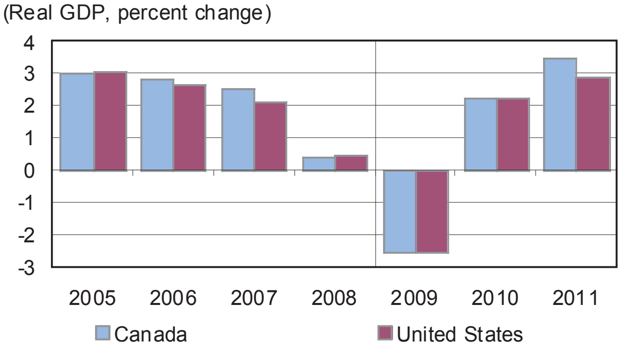
Canada and U.S. Growth Rates
(Real GDP, percent change, annualized)



With most of 2009 now behind us, it is interesting to compare Canada's performance leading up to and during the recession with the United States'. Commodity prices were very robust, which was a boon to overall output throughout 2007. The United States was fully entrenched in the recession in 2008 and output sputtered along, even with the federal government's stimulus measures, expanding a mere 0.4%. Canada entered the recession later in the year, as evidenced in the two consecutive quarterly declines in real GDP beginning in the fourth quarter of 2008. Despite this, Canada's real GDP expanded at the same slow 0.4% pace in 2008. With only one quarter left in 2009, we expect real GDP in both Canada and the United States to fall by 2.5%. While healthy economic growth is expected in the entire second half of 2009 for the United States, a true expansion in Canadian real GDP will occur only in the fourth quarter. In 2010, Canada and the United States should keep pace with each other, expanding at 2.2%. By 2011, Canada should edge out the United States by a small margin.

Despite Canada's slow headline real GDP growth in the third quarter, the underlying details are encouraging. This

Canada and United States Grow Together
(Real GDP, percent change)



In This Issue

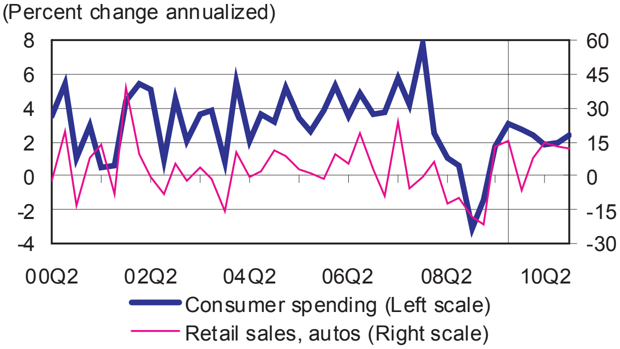
IHS GLOBAL INSIGHT

is reflected in the strong 4.7% annualized leap in final domestic demand, which was the biggest increase since first-quarter 2008. Final sales fell by a small 0.7% annualized rate, which was an improvement on the 3.5% annualized decline in the previous quarter.

Leading the growth in domestic demand was the solid 3.1% annualized advance in consumer expenditures. The advance was dominated by a sharp 9.8% leap in durable goods, namely automotive products and furniture. The strong increase in the durable items shows that the Canadian consumer is not hesitant about purchasing big-ticket items. Within the other sub-sectors, purchases of semi-durables was the only decline, contracting 0.2% (annualized rate), despite an almost 6% jump in clothing and footwear purchases. Purchases of non-durable items rose 1.6% in the quarter as the gains in food and beverages purchases outweighed the loss in energy expenditures. Services were up by a 2.8% annualized rate, following a 2.6% annualized rate increase in the second quarter.

Government stimulus spending built on the previous quarter's momentum. Government spending on goods and services advanced by 5.0% annualized in the quarter, which was very close to our forecasted 5.2% increase. In addition, government investment in fixed capital formation soared by a 24.7% annualized rate in the quarter, on top of the 16.6% advance in the previous quarter. This was the strongest climb in government investment since the first quarter of 2001. We expect fourth-quarter growth in this sector to be strong as well. For most of 2010, growth in government investment will likely be much softer than the third-quarter 2009 results, as investment projects were short-term or "upgrades" in nature, and stimulus spending initiatives were only temporary.

Real Consumer Spending and Auto Sales
(Percent change annualized)



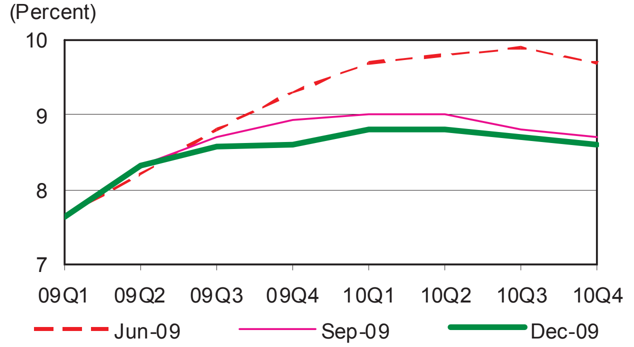
With the solid strength in Canada's housing market, it is not surprising that residential investment was up by an 8.1% annualized rate. Based on data to date, we expect growth in residential investment to continue in the fourth quarter. In the private sector, overall business fixed investment grew a very mild 4.2% annualized rate. Growth within this sector is attributable to the skyrocketing business investment in machinery and equipment, up 25.6%. This was the first increase in six quarters and the largest advance in 12 years. Meanwhile, investment in nonresidential structures fell by a 13.8% annualized rate, the fourth consecutive decline. Investment in nonresidential structures are forecasted to decline again in the fourth quarter because businesses are still reluctant to commit to significant fixed investments, as commodity prices are still fluctuating (namely natural gas) and cost cutting remains on most agendas.

For the first time in nine quarters, exports advanced at a healthy 15.3% annualized rate in the third quarter, led by a 19.6% surge exported goods. Again, a significant increase in automotive product exports was the prime suspect in the in overall advance. However, the jump in energy product exports also supported growth. Exports of services declined by a 4.5% annualized rate, which was a softer-than-expected result. Growth of imports was more than twice the increase in exports in the quarter. Overall imports grew a large 36% (annualized rate) as all sectors either rebounded or surpassed growth rates from the previous quarter. Imports of both goods (up 43.6%) and services (up 8.8%) climbed by a healthy clip. Some of the notable increases in goods import growth include energy, which climbed by 46.2%; industrial goods and material, which grew 20.5%; and machinery and equipment, which expanded by a robust 45.2%. Imports of automotive products also had a very strong quarter. While we do not expect every sector to be able to maintain the same growth rates in the fourth quarter, we do expect overall import and export growth to increase at a double-digit pace.

As we expected, there was another quarter with a drawdown of inventories. The decline in business inventories was larger than our expectations. The inventory-to-sales ratio declined slightly.

On an industry basis, real GDP increased 0.4% on a month-over-month basis in September after very weak results in the previous two months. We were expecting the monthly advance to be slightly stronger, around 0.6%. Bucking the recent trend, output in manufacturing grew a solid 1.1%, thanks to increases in primary metals, beverage and tobacco products, plastics and rubber, and transportation equipment. For the first time in 13 months, output in the mining industry (excluding oil and gas) advanced 5.6%, as production resumed at mines that were temporarily shut down. Overall industrial production climbed 1.2% from the previous month. Other notable increases were found in the retail trade industry. Solid auto sales pushed the overall retail industry value added 1.1% higher. Output in wholesale trade, consisting of a large share of overall economic output, advanced 0.4% in the month. Within the month, declines in output of utilities and agriculture took away from total growth. With results for nine months this year, we can see that output in the public sector was the only industry that firmly made a positive contribution to growth. Otherwise, the impact of the recession was wide reaching—and most devastating to the manufacturing sector—as we forecasted last year.

Unemployment Rate Forecasts Improve



Is Canada's Labour Market Out of the Recession Woods?

An astounding 79,100 jobs were added to Canadian payrolls in November. This is a 0.5% jump in employment from the previous month, which is the strongest pace since September 2008. After two months of declines, the labour force grew by a robust 0.4% in the month. The unemployment rate fell 0.1 percentage point to 8.5%. The only blemish on this very upbeat employment result was the cooling 2.3% year-over-year increase in average hourly wages for the month. This was the slowest advance since March 2007. Still, when we look at the jobs that were created, we remain optimistic about the momentum building into 2010. The numbers of jobs added were almost equally divided among full-time (up 38,600) and part-time (up 40,400) positions. Moreover, jobs in both the public and the private sector increased.

We remain optimistically cautious regarding the near-term employment and growth forecasts. In the third quarter, the Canadian economy did have a few months of decent job gains, but 35,100 jobs were lost overall in the quarter, resulting in a relatively flat increase in real GDP. So far in the fourth quarter, employment is up 25,700 jobs. Another strong gain in December should see fourth-quarter real GDP grow near 3% (annual rate). Otherwise, the outlook for 2010 seems relatively bright, with employment growing, but at a sub-1% pace.

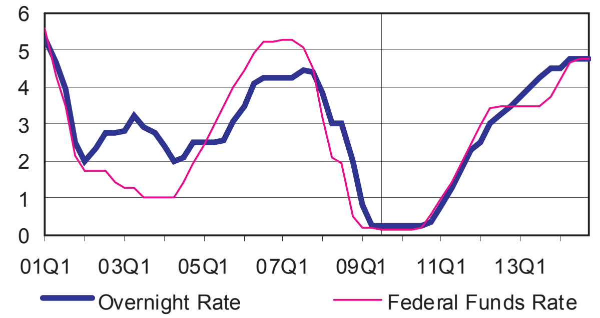
We are pleasantly surprised by the increasing improvement in the unemployment rate forecasts. Two quarters ago we (and many other economists) were expecting the unemployment rate to surpass the 9% mark by now. Instead, Canada's unemployment rate has fallen twice in the past four months. While we do not think that the unemployment rate will continue to fall at a regular pace, we do expect only small increases over the next six months, peaking below 9%. By the second half of 2010, the unemployment rate is expected to move downward.

The Bank of Canada to Stay on the Sidelines Longer Than Expected

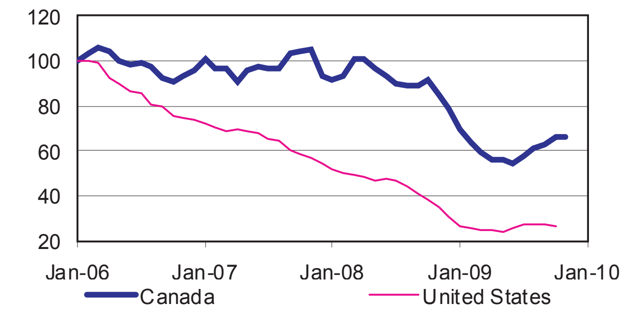
There was very little excitement leading up to the Bank of Canada's policy announcement, as it was widely expected the Bank would maintain the overnight rate at 0.25%, which it did. There was practically no new content in the policy announcement, as the Bank sees that "significant fragilities remain" and "global economic developments have been slightly more positive and the global outlook has improved modestly relative to the Bank's projection in its October *Monetary Policy Report*."

The Bank's outlook on inflation remains the same: a return to the 2% target in the latter half of 2011 as the Canadian

Monetary Policy Trends
(Percent)



Housing Starts—Canada Rebounds
(Three-month moving average, index, January 2006=100)



economy rebounds at a more solid pace. The risks on the Bank's radar are also unchanged: the upside risks are stronger-than-expected increases in foreign and domestic demand, and the downside risks are a longer-than-anticipated period of global recovery and a stubbornly high Canadian dollar, which would be a drag on real GDP growth and inflation. Because of the relatively high Canadian dollar, we have adjusted our outlook for the overnight rate. We are now forecasting the Bank to begin raising rates towards the end of 2010, after the Federal Reserve resumes tightening monetary policy, lessening the impact of any downward risks, namely the appreciating Canadian dollar. We believe this is the biggest threat to the Bank's monetary policy decision right now. Once the Bank of Canada begins tightening monetary policy, it will likely do so for some time, since rates cannot stay at low levels as the economy heats up.

Canada's Housing Market Rebounds Handily

November Canadian housing starts reached the highest level so far in 2009, increasing 0.7% in the month to 158,500 annualized units, which was a bit higher than consensus expectations. We were forecasting a small dip in starts. The small increase was due to the gain in single-family starts as multi-family starts declined. There was plenty of monthly volatility in housing starts among the provinces. Saskatchewan led housing starts growth in the month, skyrocketing 69%, reaching a 12-month high. Meanwhile, Nova Scotia had the largest decline (down 30%). With this latest result, it is obvious that Canada's housing market is very healthy, especially when compared with the U.S. market. We can see that the Canadian housing market has easily rebounded in the third and fourth quarter, as we expected. Advances are notable in both new and existing housing. Meantime, U.S. housing starts are unwavering. Our outlook for next year remains strong, as we expect housing starts to average around 170,000 units.

by Arlene Kish

High-Frequency Indicators
(As of December 11)

	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Dec-10
Real GDP by Industry (M/M, percent)	**0.4**	0.4	0.3	0.2	0.2	0.2	0.2
Employment (Thous.)	**31**	**-43**	**79**	6	3	3	25
Unemployment Rate (Percent)	**8.4**	**8.6**	**8.5**	8.7	8.7	8.8	8.6
Consumer Price Index (Y/Y, percent)	**-0.9**	**0.1**	1.3	1.9	1.7	1.4	2.0
Exchange Rate, Month-End (U.S. cents)	**93.40**	**92.43**	**94.73**	93.97	92.34	91.18	89.26
Exchange Rate, Average (U.S. cents)	**92.44**	**94.80**	**94.38**	94.73	93.22	91.47	89.13
3-Month T-Bill Rate, Month-End	**0.22**	**0.22**	**0.21**	0.33	0.32	0.31	0.65
Overnight Rate, Month-End	**0.25**	**0.25**	**0.25**	0.25	0.25	0.25	0.50

Note: Bolded numbers indicate historical data.

TABLE 3

Canadian Annual Forecast Summary

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Real GDP (Bil. chained 2002 dollars)	1315.9	1321.4	1287.7	1316.4	1362.1	1411.7	1457.5	1499.4	1537.7
Percent Change	2.5	0.4	-2.5	2.2	3.5	3.6	3.2	2.9	2.6
Consumer	787.1	810.7	811.2	830.3	851.5	874.7	896.0	916.4	936.3
Percent Change	4.6	3.0	0.1	2.3	2.6	2.7	2.4	2.3	2.2
Government	294.4	308.6	321.7	337.8	348.6	359.1	368.1	376.2	384.2
Percent Change	3.6	4.8	4.3	5.0	3.2	3.0	2.5	2.2	2.1
Bus. Res. Investment	80.5	78.3	71.7	74.2	76.0	78.2	79.8	80.9	82.0
Percent Change	2.9	-2.7	-8.5	3.6	2.5	2.8	2.1	1.3	1.5
Bus. Non-Res. Inv.	194.2	194.6	167.1	171.4	177.5	183.8	189.2	193.5	197.1
Percent Change	3.7	0.2	-14.1	2.6	3.5	3.6	3.0	2.2	1.9
Exports	510.3	486.3	420.6	454.4	481.4	512.7	543.0	573.6	607.3
Percent Change	1.1	-4.7	-13.5	8.0	5.9	6.5	5.9	5.7	5.9
Imports	572.1	576.9	501.2	557.8	581.9	604.6	626.4	650.2	679.3
Percent Change	5.8	0.8	-13.1	11.3	4.3	3.9	3.6	3.8	4.5
Business Inventory Change	15.0	12.2	-6.3	4.1	7.0	5.8	5.4	6.1	6.6
Statistical Error	-0.8	-1.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Nominal GDP (Billion dollars)	1532.9	1600.1	1528.6	1601.1	1693.4	1796.9	1896.8	1991.4	2078.9
Percent Change	5.8	4.4	-4.5	4.7	5.8	6.1	5.6	5.0	4.4
Raw Mat. Price Index	174.1	196.3	151.0	159.7	161.0	161.1	162.8	164.7	167.7
Percent Change	7.7	12.8	-23.1	5.7	0.8	0.1	1.1	1.2	1.8
Industry Price Index	115.6	120.6	116.5	118.0	121.1	123.4	125.6	127.6	129.2
Percent Change	1.6	4.3	-3.4	1.2	2.6	1.9	1.8	1.5	1.3
GDP Deflator	116.5	121.1	118.7	121.6	124.3	127.3	130.1	132.8	135.2
Percent Change	3.1	3.9	-1.9	2.4	2.2	2.4	2.2	2.1	1.8
CPI	111.5	114.1	114.5	116.4	118.7	121.0	123.4	125.9	128.4
Percent Change	2.1	2.4	0.4	1.6	2.0	2.0	2.0	2.0	2.0
Employment (Thousands)	16865	17123	16852	17004	17285	17563	17829	18128	18426
Percent Change	2.3	1.5	-1.6	0.9	1.7	1.6	1.5	1.7	1.6
Unemployment Rate (Percent)	6.0	6.2	8.3	8.7	8.4	7.9	7.6	7.1	6.6
Productivity (Percent change)	0.2	-1.1	-1.0	1.3	1.8	2.0	1.7	1.2	0.9
Average Hourly Earnings	19.48	20.16	20.47	20.78	21.19	21.78	22.57	23.38	24.20
Percent Change	3.9	3.5	1.6	1.5	2.0	2.8	3.6	3.6	3.5
3-Month T-Bill Rate (Percent)	4.15	2.39	0.35	0.27	1.59	3.08	4.13	4.69	4.75
U.S. 3-Month T-Bill Rate (Percent)	4.38	1.40	0.15	0.46	2.13	3.35	3.66	4.57	4.59
Canada-U.S. Differential	-0.23	0.98	0.20	-0.19	-0.54	-0.27	0.47	0.12	0.16
Prime Rate (Percent)	6.10	4.73	2.39	2.27	3.53	5.07	6.13	6.69	6.75
Overnight Rate (Percent)	4.34	2.96	0.39	0.27	1.53	3.07	4.13	4.69	4.75
Bank Rate (Percent)	4.60	3.21	0.64	0.52	1.78	3.32	4.38	4.94	5.00
GOC Bond Rate (1-3 yrs.) (Percent)	4.22	2.66	1.29	1.62	2.58	3.70	4.45	5.07	5.11
GOC Bond Rate (3-5 yrs.) (Percent)	4.21	2.96	2.19	2.59	3.29	4.15	4.68	5.34	5.36
GOC Ten-Year Bond Rate (Percent)	4.28	3.58	3.32	3.65	4.07	4.64	4.93	5.64	5.64
U.S. Ten-Year T-Note Rate (Percent)	4.63	3.67	3.24	3.50	3.92	4.48	4.78	5.48	5.49
U.S. Real GDP (Bil. 2005 US$)	13254.1	13312.2	12973.2	13264.0	13646.6	14162.0	14598.8	14988.2	15354.9
Percent Change	2.1	0.4	-2.5	2.2	2.9	3.8	3.1	2.7	2.4
Household Credit (Billion dollars)	1135.6	1258.7	1354.7	1463.8	1587.2	1705.2	1813.0	1913.7	2010.1
Percent Change	10.9	10.8	7.6	8.1	8.4	7.4	6.3	5.6	5.0
Standard of Living Canada/U.S. (Nominal GDP per Capita at PPP Can/U.S.)	0.827	0.830	0.828	0.827	0.832	0.833	0.834	0.836	0.836
Exchange Rate (U.S.-Can.)	93.5	94.3	87.9	89.6	91.2	93.0	93.2	92.1	89.0
Curr. Acct. Bal. (Billions of dollars)	15.6	8.1	-45.1	-45.5	-34.7	-20.2	-7.8	2.0	2.8
Fed. Gov't. NA Bal. (Billion dollars)	15.2	2.7	-31.1	-19.3	-2.7	7.4	8.3	8.3	5.8
Percent GNP	1.0	0.2	-2.1	-1.2	-0.2	0.4	0.4	0.4	0.3
Before-Tax Profit (Billion dollars)	204.1	215.8	139.9	174.0	204.8	227.1	229.6	242.4	265.0
Percent Change	4.1	5.7	-35.2	24.3	17.7	10.9	1.1	5.6	9.3
Housing Starts (Thousands)	228	211	142	167	172	179	185	185	183
Auto Sales (Thous. SAAR)	1690.5	1674.1	1485.5	1514.9	1605.1	1655.8	1702.8	1723.8	1685.5
Nominal Exports (Billion dollars)	534.6	562.2	438.9	477.4	516.8	562.3	605.1	647.7	692.3
Nominal Imports (Billion dollars)	504.6	536.8	469.6	517.6	548.7	579.2	609.7	643.4	686.2
Nominal Trade Balance (Billion dollars)	29.9	25.4	-30.7	-40.2	-31.9	-16.9	-4.6	4.3	6.2
Personal Saving Rate (Percent)	2.5	3.7	4.9	3.5	2.4	2.3	3.2	3.9	4.5
Real Disp. Inc. Growth (Percent)	3.6	4.2	1.1	0.2	1.0	2.3	3.3	2.9	2.7
Industrial Production - Percent Change	0.1	-4.2	-10.3	7.3	7.3	6.2	4.4	4.2	3.6

CCC Interrogatory #013

Ref: Ex. C1-T1-S2, page 8

Issue Number: 3.2
Issue: Are OPG's proposed costs for its long-term and short-term debt components of its capital structure appropriate?

Interrogatory

The evidence indicates approximately $800 million in new borrowing is needed to finance the Niagara Tunnel Project over the 2010-212 period. OPG does not plan to undertake any other project-related financing for the regulated assets during the test period. Please explain why OPG does not need to borrow for other projects. In addition, please explain, to what extent, if any, OPG's proposal to recover CWIP in rate base may affect its borrowing requirements. What if the CWIP proposal is rejected?

Response

It is not OPG's position that it does not need to borrow for other projects. Project-related financing applies only to financing arrangements that have been established for specific projects. Financing for other projects would fall under Existing/Planned Long Term Debt.

Rejection of the Construction Work In Progress ("CWIP") proposal is expected to increase borrowing requirements.

CCC Interrogatory #014

Ref: Ex. C1-T1-S2

Issue Number: 3.2
Issue: Are OPG's proposed costs for its long-term and short-term debt components of its capital structure appropriate?

Interrogatory

Please explain if OPG's proposals for debt costs are consistent with the Board's Cost of Capital Report. To the extent they are not consistent please explain why.

Response

OPG's proposals for debt costs are consistent with the OEB's Cost of Capital Report:

- Short-term Debt: The OEB's Cost of Capital Report states at page 56 that the approach to be used by OPG for its short-term debt shall be "Consistent with the Board's practice in OPG's 2008 Cost of Service Application (EB-2007-0905)". In this application, OPG has applied the same methodology it used in EB-2007-0905.

- Long-Term Debt: The OEB's Cost of Capital Report states at page 51 that the approach to be used by OPG for its long-term debt shall be "Consistent with the Board's practice in OPG's 2008 Cost of Service Application (EB-2007-0905)". In this application, OPG has applied the same methodology used by it in EB-2007-0905.

- Other Long-Term Debt Provision: There is no specific reference in the OEB's Cost of Capital Report related to OPG's Other Long-Term Debt Provision. In EB-2007-0905 the OEB determined that the incremental hedged cost of long-term debt should be used. As discussed in response to Ex. L-01-014, in this application, OPG has applied the provision from the report that applies to electricity distributors with no actual debt (page 54, bullet #1). Specifically, OPG has used its deemed debt rate as it has "no actual debt" to support its Other Long-Term Debt Provision.

VECC Interrogatory #005

Ref: Ex. C1-T1-S2, pages 10 and 11

Issue Number: 3.2
Issue: Are OPG's proposed costs for its long-term and short-term debt components of its capital structure appropriate?

Interrogatory

On pages 10 and 11 OPG describes how, for the deemed debt component of its capital structure it applies the Board's deemed long-term debt rate, and that for the purposes of the application that rate is 5.87%, but that OPG proposes that that rate be updated at the time of the final rate order.

a) Please calculate the revenue requirement impact (for each test year) of applying the weighted average cost of OPG's actual long-term debt to the deemed long-term debt. (With reference to Exhibit C1, Tab 1, Schedule 1, tables 1 and 2, VECC believes that the calculation begins with applying a rate of 5.5% to the Other Long-Term Debt of $877.7M in 2012 and a rate of 5.53% to the Other Long-Term Debt of $725.2M in 2011) VECC is aware that Board Staff IR 15 b) asks a similar question, although VECC is seeking the full revenue requirement impact of the change, plus VECC would like an additional calculation performed and included in the same response; see the requested second calculation in part b) of this IR.

b) Please calculate the revenue requirement impact for (each test year) of applying the weighted average cost of its actual debt (both long-term and short-term) to the deemed long-term debt. (With reference to Exhibit C1, Tab 1, Schedule 1, Tables 1 and 2, VECC believes that the calculation begins with applying the weighted average cost rate of rows 1 and 2 in Table 1 and applying it to the Other Long-Term Debt of $877.7M in 2012, and applying the weighted average cost rate of rows 1 and 2 in Table 2 and applying it to the Other Long-Term Debt in 2011 of $725M in 2011).

Response

a) OPG's Other Long-Term Debt Provision amounts for 2011 and 2012 are $877.7M and $725.2M, respectively, as opposed to $725.2M and $877.7M as cited in the question.

The response in Ex. L-1-015 calculates the revised interest expense for the Other Long-Term Debt Provision at $39.9M in 2012 and $48.5M in 2011. The corresponding costs at the deemed debt rate are $42.6M in 2012 and $51.5M in 2011 as shown in Ex. C1-T1-S1, Table 1 (2012) and Table 2 (2011). The lower interest expense results in higher taxable income and higher income tax calculated at the rate of 25 per cent in 2012 and

26.5 per cent in 2011 (Ex. F4-T2-S1, Table 5). The total revenue requirement impact is summarized below:

Revenue Requirement Component	2011 ($M)	2012 ($M)	2011 – 2012 ($M)
Lower Interest Expense	(3.0)	(2.7)	(5.7)
Higher Income Taxes	0.8	0.7	1.5
Total Revenue Requirement Impact	(2.2)	(2.0)	(4.2)

b) The impact on the revenue requirement in 2012 of replacing the deemed debt cost with the weighted average cost of all existing/planned debt for the Other Long-Term Debt is the same as in part a) as this weighted average rate is also 5.50 per cent as shown below.

Capital Structure Component	Principal ($M)	Cost Rate (%)	Cost ($M)
Short-Term Debt	189.5	4.13	10.4
Existing/Planned Long-Term Debt	2,502.8	5.50	137.6
Total Actual Debt	2,692.3	5.50	148.1

The impact on the revenue requirement in 2011 of replacing the deemed debt cost with the weighted average cost of all existing/planned debt for the Other Long-Term Debt is slightly higher ($0.7M) than in part a) as the weighted average rate falls from 5.53 per cent in part a) to 5.41 per cent as shown below.

Capital Structure Component	Principal ($M)	Cost Rate (%)	Cost ($M)
Short-Term Debt	189.5	2.64	7.6
Existing/Planned Long-Term Debt	2,283.1	5.53	126.2
Total Actual Debt	2,472.6	5.41	133.7

At a rate of 5.41 per cent the Other Long-Term Debt Provision of $877.7M for 2011 results in a cost of debt of $47.5M, versus the $51.5M in Ex. C1-T1-S1, Table 2. The total revenue requirement impact is summarized below:

Revenue Requirement Component	2011 ($M)	2012 ($M)	2011 – 2012 ($M)
Lower Interest Expense	(4.0)	(2.7)	(6.7)
Higher Income Taxes	1.1	0.7	1.8
Total Revenue Requirement Impact	(2.9)	(2.0)	(4.9)