

### **Undertaking # 39**

MPI to use best efforts to expand on MPI Exhibit 27 and prepare two (2) schedules, the first tied to the GRA as originally submitted, the second tied to the GRA as amended on October 7, 2016, both schedules to include forecast and actual, where available, information at successive quarter ends from February 2016 to February 2017 with respect to Government of Canada 10-year bond yield, marketable bond portfolio duration, yield to maturity, assumed spread, non-marketable bond yield to maturity, total bond portfolio yield to maturity, and valuation discount rate.

### **RESPONSE:**

Please see attached. Schedule 1 provides the requested data for the 2017 GRA as originally submitted, which is based on the March 2016 Standard interest rate forecast. Schedule 2 provides the requested data for the Revised 2017 GRA, amended on October 7, 2016, which is based on the August 50 50 interest rate forecast.

**Original 2017 GRA based on March 2016 Standard Interest Rate Forecast**
**GoC 10 Year Bond Yield**

	<b>Actual</b>	<b>Original</b>	<b>Variance</b>
Q1 2016/17	1.32%	1.33%	-0.01%
Q2 2016/17	1.02%	1.42%	-0.40%
Q3 2016/17		1.58%	
Q4 2016/17		1.76%	

**Marketable Bond Duration (Years)**

	<b>Actual</b>	<b>Original</b>	<b>Variance</b>
Q1 2016/17	12.2	12.5	(0.3)
Q2 2016/17	12.3	12.5	(0.2)
Q3 2016/17		12.2	
Q4 2016/17		12.1	

**Marketable Bond Yield to Maturity**

	<b>Actual</b>	<b>Original</b>	<b>Variance</b>
Q1 2016/17	2.63%	2.99%	-0.36%
Q2 2016/17	2.31%	3.08%	-0.77%
Q3 2016/17		3.21%	
Q4 2016/17		3.38%	

**Marketable Bond Duration Yield Spread**

	<b>Actual</b>	<b>Original</b>	<b>Variance</b>
Q1 2016/17	1.31%	1.66%	-0.35%
Q2 2016/17	1.29%	1.66%	-0.37%
Q3 2016/17		1.63%	
Q4 2016/17		1.62%	

**MUSH Yield**

	<b>Actual</b>	<b>Original*</b>	<b>Variance</b>
Q1 2016/17	4.76%	4.72%	0.04%
Q2 2016/17	4.75%	4.68%	0.07%
Q3 2016/17		4.65%	
Q4 2016/17		4.62%	

\*differs from Undertaking #12 due to copy and paste error

**Total Fixed Income Portfolio Yield (Market Weighted)**

	<b>Actual</b>	<b>Original</b>	<b>Variance</b>
Q1 2016/17	3.41%	3.61%	-0.20%
Q2 2016/17	3.15%	3.66%	-0.51%
Q3 2016/17		3.73%	
Q4 2016/17		3.84%	

**Claims Discount Rate (Duration Weighted Fixed Income Yield)**

	<b>Actual</b>	<b>Original</b>	<b>Variance</b>
Q1 2016/17	3.19%	3.48%	-0.29%
Q2 2016/17	2.87%	3.55%	-0.68%
Q3 2016/17		3.66%	
Q4 2016/17		3.79%	

**Revised 2017 GRA based on August 2016 50 50 Interest Rate Forecast**
**GoC 10 Year Bond Yield**

	<b>Actual</b>	<b>August 50 50</b>	<b>Variance</b>
Q1 2016/17	1.32%	1.32%	0.00%
Q2 2016/17	1.02%	1.03%	-0.01%
Q3 2016/17		1.05%	
Q4 2016/17		1.11%	

**Marketable Bond Duration (Years)**

	<b>Actual</b>	<b>August 50 50</b>	<b>Variance</b>
Q1 2016/17	12.2	12.5	(0.3)
Q2 2016/17	12.3	12.5	(0.2)
Q3 2016/17		12.7	
Q4 2016/17		12.6	

**Marketable Bond Yield to Maturity**

	<b>Actual</b>	<b>August 50 50</b>	<b>Variance</b>
Q1 2016/17	2.63%	2.98%	-0.36%
Q2 2016/17	2.31%	2.69%	-0.77%
Q3 2016/17		2.73%	
Q4 2016/17		2.78%	

**Marketable Bond Duration Yield Spread**

	<b>Actual</b>	<b>August 50 50</b>	<b>Variance</b>
Q1 2016/17	1.31%	1.66%	-0.35%
Q2 2016/17	1.29%	1.66%	-0.37%
Q3 2016/17		1.68%	
Q4 2016/17		1.67%	

**MUSH Yield**

	<b>Actual</b>	<b>August 50 50</b>	<b>Variance</b>
Q1 2016/17	4.76%	4.72%	0.04%
Q2 2016/17	4.75%	4.68%	0.07%
Q3 2016/17		4.64%	
Q4 2016/17		4.59%	

**Total Fixed Income Portfolio Yield (Market Weighted)**

	<b>Actual</b>	<b>August 50 50</b>	<b>Variance</b>
Q1 2016/17	3.41%	3.60%	-0.19%
Q2 2016/17	3.15%	3.38%	-0.23%
Q3 2016/17		3.40%	
Q4 2016/17		3.42%	

**Claims Discount Rate (Duration Weighted Fixed Income Yield)**

	<b>Actual</b>	<b>August 50 50</b>	<b>Variance</b>
Q1 2016/17	3.19%	3.47%	-0.28%
Q2 2016/17	2.87%	3.23%	-0.36%
Q3 2016/17		3.25%	
Q4 2016/17		3.29%	