Q. Reference Evidence of Laurence Booth dated September 25, 2018

Page 5, lines 11-12: Please explain in detail the basis for the 3.8% trigger for the forecast long Canada bond yield.

A. **Dr. Booth's answer to PUB-CA-001 in 2016 continues to reflect his judgment today, subject to his current misgivings expressed in the current PUB-CA-001. For completeness, the answer from 2016 is reproduced below.**

"Risk Premium models assume an investor trading off risk versus return, so that the expected return on equities and the risk free rate are determined in a capital market equilibrium, where the return on a Government of Canada security is the risk free rate. However, it has become increasingly clear that government bond yields are not being set by ordinary investors trading off risk versus return, but by what RBC terms the global policy maker. As Dr. Booth explains in his testimony on pages 19-24 it is central bank intervention in the major capital markets in Europe, the UK, Japan and the US that are determining long bond yields.

To determine the extent to which government intervention elsewhere has affected long term bond yields in Canada, Dr. Booth uses the preferred stock yield as a proxy. Dividends in Canada receive preferential tax treatment through the dividend tax credit. However, the dividend tax credit is not extended to foreign investors, such that the preferred share market is predominantly a Canadian market. As a result, the spread of the preferred share yield over that for long Canada bonds versus the spread of the A bond yield over long Canada bonds is indicative of the extent to which the Canadian bond market has been affected by the global policy maker.

In Dr. Booth's 2012 NP testimony he showed that the preferred share spread compared to the A bond yield spread had widened significantly. At that time Dr. Booth estimated what he termed the effect of "Operation Twist," which was the US government bond buying program at 0.80% and increased the 3.0% forecast long Canada bond yield accordingly. He also recommended that the Board's automatic ROE adjustment mechanism operate with a 3.8% floor while the Board accepted 3.8% as the forecast long Canada bond yield.

Currently the consensus forecast for long Canada bond yields is even lower than at that time at 2.81%, while the preferred dividend yield spread has increased and been extremely volatile through 2015. Dr. Booth would therefore maintain his recommendation that a 3.8% long Canada bond yield is a minimum value consistent with investors trading off risk versus expected returns at this stage in the business cycle. Note in the AON Hewitt capital market outlook provided by NP in answer to CA-NP-269 they place their current target long Canada bond yield at 4.18%. He would regard AON-Hewitt's target rate as equivalent to a normal rate. "