

**Undertaking #78 (Transcript pages 4075 – 4076)**

MIPUG to provide the underlying data of slide 27 of Exhibit MIPUG-12 and show the calculations of how rate increase calculations were done, as well as how the related impacts on finance expense were calculated.

**Response:**

The attached Excel file provides the derivation of the calculations on Slide 27 of Exhibit MIPUG-12 (Mr. Bowman's direct examination).

Of note:

- 1) The file provides active links for all calculations. IFF14 values were used throughout with the exception of cells where the formula calculations are noted.
- 2) The first tab "comparison" provides the graphic image and input data to the graph.
- 3) The second tab is a direct copy of IFF14.
- 4) The third tab is the verification exercise performed to confirm that the rate impact calculations were working consistent with Hydro's approach (per MH Exhibit 113). In particular, the tab recreates the values in Hydro's scenario of 3.5% rate increases throughout the 20 year forecast. The last row of this tab shows the verification results, which is an accurate cash flow within 0.23% (different of \$0.035 billion over 20 years on cash flow of \$15.4 billion – with Mr. Bowman's approach yielding slightly low cash generation values).
- 5) The last three tabs derive Mr. Bowman's projections.
  - a. First, the values used as input to the vacancy calculation is provided, consistent with PUB/MIPUG-12 and the transcript at page 2470.
  - b. Second and third are the tabs for the 2.5% for four years line (the red dotted scenario) and the 2.0% for one year (the blue dashed scenario).

Mr. Bowman notes that in preparation of the file for distribution, to make interpretation easier for reviewers, values were actively linked to the input variables in earlier steps. The net result is an immaterial but slight revision to the values.

Also of note is that the file is live, so that other rate scenarios can be run on the same basis by changing the values in the tab called "Ex.MIPUG-12 pg 27 – 2.5%" at row 43.