**Sentinel Light Revenue to Cost Ratio Adjustment**

**Explanation of Methodology**

**A – Revenue to Cost Ratio Calculation**

The model named *“Sentinel-Light\_Revenue\_to\_Cost\_Ratio\_Adjustment\_to\_70%”* was used to increase the Sentinel Light percent from 60% to the 70%.

During the Settlement Conference it was agreed that the Residential, General Service >50 to 999 kW and Street Lighting customer classes would each be maintained at the same revenue to cost ratio and the future adjustments would not impact the remaining customer classes. The adjustment up was done though a “Goal Seek” using the following steps:

1. Column H – Change the Sentinel Light percent from 60% to 70%;
2. Column K – the Total Proposed Base Revenue increased by to $16,310,927, the difference in Cell K19 becomes $4,851;
3. Because the Proposed Base Revenue of $16,306,076 must be maintained we used the “Goal Seek” to determine what revenue to cost ratio would be required to the Residential, General Service >50 to 999 kW and Street Lighting customer classes in order to maintain the Base Revenue.

Goal Seek

* Set Cell K19 to zero by changing Cell H7 (Residential with the other two classes linked to this cell)
* The Cells H7, H9 and H13 changed accordingly.

The model also includes a table beginning at Cell23 that provides the 2016 Revenue to Cost Ratio and the 2017 Proposed Revenue to Cost Ratio. The Base Revenue Before 2017 IRM Application remains the same.

**B – Fixed / Variable Rates**

The model named *“Sentinel\_Light\_Rev\_to\_Cost\_Ratio\_Adj\_to\_70%\_Fixed\_Variable\_Rates”* uses the class revenues from column B (which is taken from column K in part “A” above) and splits the individual class revenue using the existing Fixed / Variable split.

The fixed rate is determined by taking the class revenue from column B, multiplied by the percent of Current Fixed Charge Split (beginning from Cell C23), divides by 12 months and then divides by the Approved-Forecast customer counts to get the monthly fixed charge.

The variable rate is the total class revenue less the revenue from the fixed charge divided by the Approved-Forecast kWh or kW.

The Residential class fixed charge is then adjusted for the second year adjustment towards the 100% fixed rate.

The adjustment required to the current Approved-Rates is included in the 2017 Rate Generator Model in columns C and E before the Price Cap Index is applied.

In 2018 Milton Hydro will use this same methodology to adjust the Sentinel Light revenue to cost ratio to 80%.